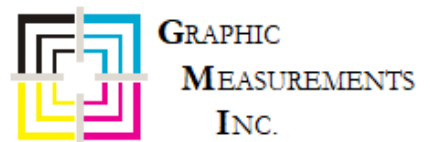


Mercury Training and User's Guide





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1 Introduction to Mercury

This training and user's guide teaches press operators how to use the basic features of Advanced Vision Technology's Mercury system for presses.

See the *Mercury Advanced User's Manual*, for information on additional Mercury features.

1.1 Mercury System Installation

1.1.1 Warnings

WARNING: Installation and use of this equipment is restricted to a non-explosive atmosphere. In case the equipment is integrated into a printing press that uses solvents, the integrator will be responsible for installation of the equipment outside the zone rated: Zone 1 or Zone 2 (ATEX rating).

ATTENTION: The attention of the specifier, purchaser, installer, or user is drawn to special measures and limitations to use which must be observed when the product is taken into service, to maintain compliance with the directives indicated in the EU [Declaration of Conformity](#). Details of these special methods and limitations are available on request and are also contained in the product manuals and installation procedures. Moreover, this equipment must not be put into service until the machinery into which it is incorporated has been declared in conformity with the provision of all other relevant EU directives.



WARNING: Warning labels as shown at left indicate electric shock hazard zones on the equipment. **DO NOT** remove guards or place hands in these locations at any time that power is applied.



WARNING: Warning labels as shown at left indicate that you should refer to detailed instructions in the equipment Installation and Service Manual before making access to this area or attempting to perform service.



WARNING: Warning labels as shown at left indicate that there are no user serviceable parts inside. Customer Service can assist you if system components need to be exchanged or replaced.

2.1.2 Manufacturer's Information

Company: Graphic Measurements
Address: 1207 Beta Court, Rockwall Tx 75087
Toll Free – 1 844.464.7782 (844-GMI-SRVC)

Product Description: Remote Ink Control System for the Printing Industry
Product Name: Mercury
System Part Numbers: 090G100XXX-YY
Where:
XXX = Server Hardware Type Configuration
YY = Interface Control Type Configuration
System Serial Numbers: N7168 thru 99999
Product Classification: Remote ink control system for Printing Industry
Product Environment: Light Industrial (Support Equipment)
Industrial (Systems)



Mercury System Label

1.1.3 Dimensions / Weight / Power Requirements

The full system varies based on press configuration and number of print units.

Mercury 2U Server/Client

Dimensions:

Width: 19 inches (482 mm)
Height: 3.46 inches (88 mm)
Depth: 18.9 inches (480 mm)

Weight: 25.7 lbs. (11.7 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 400W

Mercury 1U Server/Client

Dimensions:

Width: 19 inches (482 mm)
Height: 1.7 inches (44 mm)
Depth: 19.6 inches (497 mm)

Weight: 17.6 lbs. (8 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 400W

Servo Power Unit

Dimensions:

Width: 12 inches (304 mm)
Height: 12 inches (304 mm)
Depth: 7 inches (177.8 mm)

Weight: 18 lbs. (8.2 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 300W

UPS

Dimensions:

Width: 3.60 inches (91.4 mm)
Height: 6.50 inches (165 mm)
Depth: 11.20 inches (284 mm)

Weight: 12.5 lbs. (5.68 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 350VA

22" LCD Touchscreen Display

Dimensions:

Width: 21.7 inches (551 mm)
Height: 15.4 inches (392 mm)
Depth: 7.6 inches (193 mm)

Weight: 16.5 lbs. (7.5 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 30W

32" LCD Touchscreen Display

Dimensions:

Width: 30.0 inches (763 mm)
Height: 18.0 inches (457.3 mm)
Depth: 2.4 inches (61.6 mm)

Weight: 35.8 lbs. (17.47 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 55W

OCU3 44 Zone Options

Dimensions:

Width: 41 inches (1041 mm)
Height: 3.5 inches (89 mm)
Depth: 9 inches (228.6 mm)

Weight: 30 lbs. (13.6 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 150W

PLC 10I / 200 Option

Dimensions:

Width: 13.80 inches (350.5 mm)
Height: 5.50 inches (140 mm)
Depth: 10.00 inches (254 mm)

Weight: 11.0 lbs. (4.98 kgs.)

Power Requirements:

115 /230VAC (+/-10%), 50/60 Hz, 150W

Noise pressure level at operators station: < 70dB(A)

1.1.4 Intended Operating Environment

This provides justification for use in an industrial environment.

Operating Environment

Advanced Vision Technology products are designed to operate in an industrial environment used for printing presses and similar equipment.

Temperature: 32 to 122 °F, 0 to 50 °C
Relative Humidity: 20-80% RH non-condensing

Storage Environment

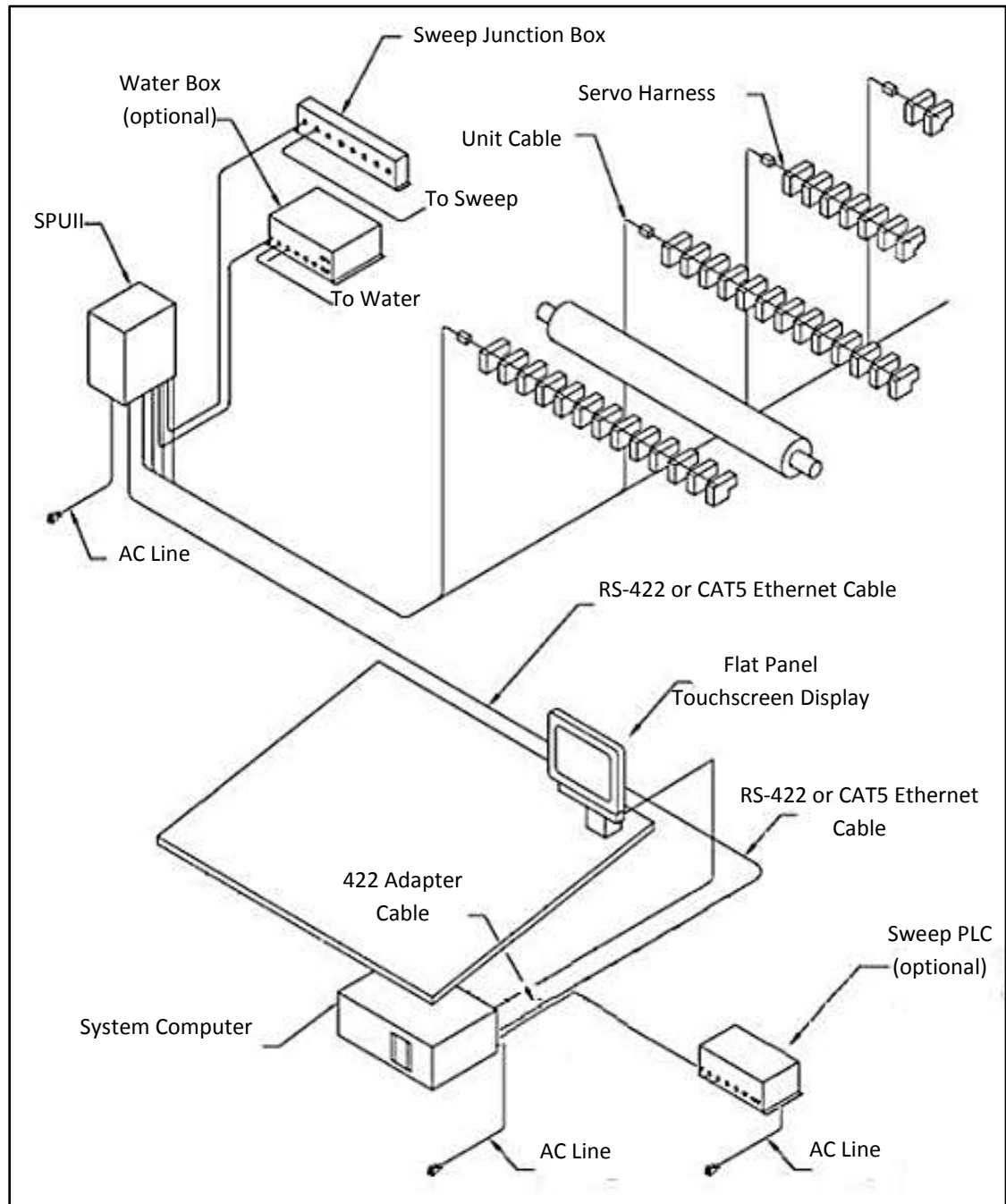
If any Advanced Vision Technology products or any sub-systems require temporary storage in an area other than its operating environment, the following should be maintained.

Temperature: -4 to 140 °F, -20 to 60 °C
Relative Humidity: 5 to 90% RH non-condensing

Limitations in Intended Operating Environment

Metal covers are provided to protect all on-press electronics and mechanical interconnects. These metal covers prevent contamination for the product and related components. Contamination includes dirt, dust, moisture, ink, solvents and oil. Full product warranty requires mandatory use of these covers at all times, except for calibration and service functions.

1.2 Mercury System Components Overview

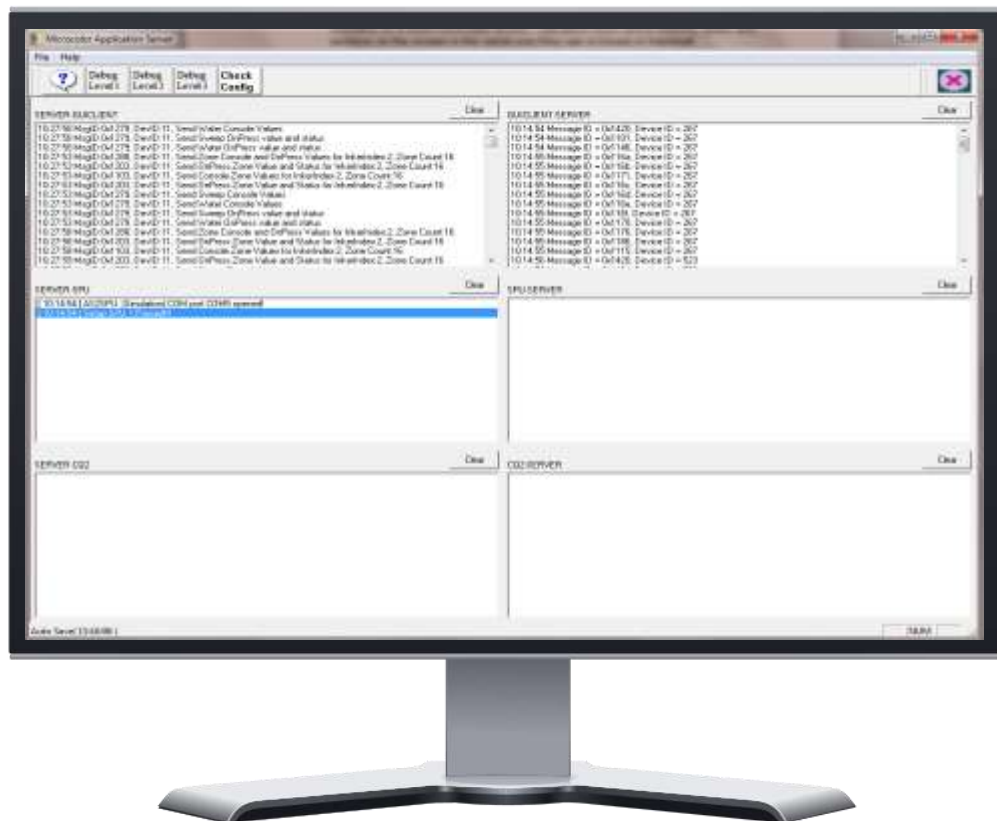


1. The Mercury system computer resides inside a console and connects to a touch-screen monitor on top of the console.
2. The Mercury system computer interprets zone settings and commands sent from the Mercury server application to the console. The system computer also sends commands over an RS-422 or CAT5 Ethernet cable to the Servo Power Units (SPUs).

3. The monitor displays the configured number of ink zone settings for the ink fountains on a touch-controlled screen. Operators touch active buttons, fields, and sections on the screen in the same way they use a mouse or trackball.
4. The SPUs relay commands sent from the console to the press.
5. The servos turn adjustable keys that replace the original ink fountain keys. The servos have mechanical stops used for calibration and to prevent the keys from being driven into the blade.
6. The optional sweep Program Logic Control (PLC) can be used to increase or decrease sweep time or speed of an ink fountain roller.

1.3 Mercury Server Application

The Mercury server application typically runs in the background (out of the operator's normal view) and supports communication to Mercury workstation(s), the SPU(s), and to Clarios.



1.4 Mercury Workstation Application

The Mercury workstation application (Client) can be installed on a stand-alone or shared computer that is also used for the Mercury server application.

Note: If the workstation application is installed on a shared computer, it must be stopped to view the server application.



1.5 Mercury CIP3 Presets

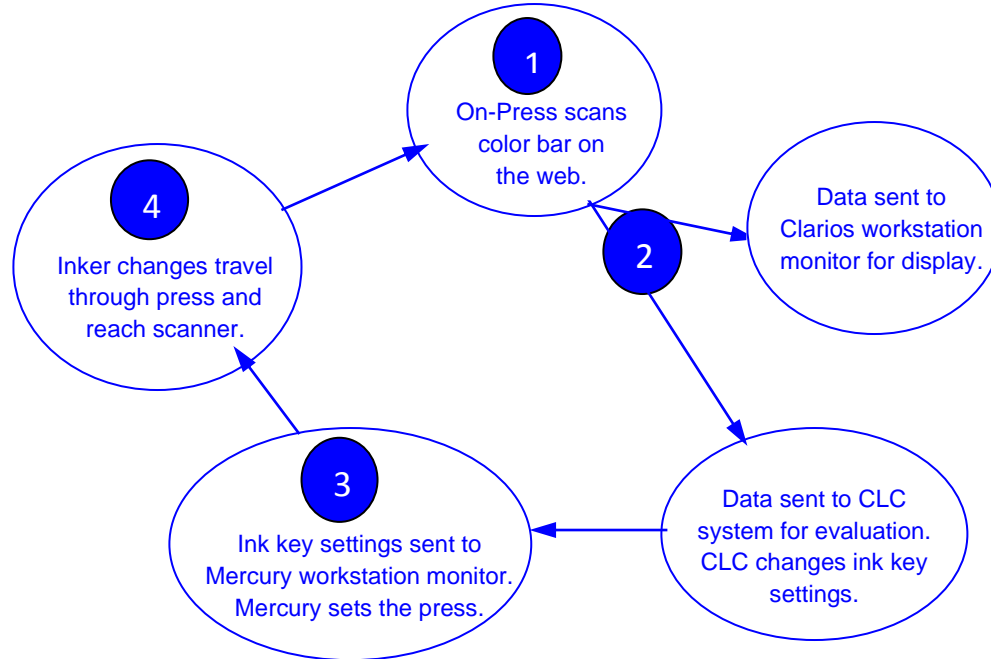
International Cooperation for Integration of Prepress, Press, and Postpress (CIP3) data is received when plates are created in prepress. The file passes through the network and is available for recall at any Mercury workstation with the CIP3 option installed.

The CIP3 presets adjust key values based on coverage calculated from the plate image. Each time that a job starts, the key values are memorized by the system and then compared to the ending values. The system learns by comparing these two values and making adjustments, if needed, to the next job using CIP3 data.

For more information, refer to [Set Up CIP3 Presets](#) in this manual.

1.6 Mercury and Clarios Interface

The Closed Loop Control (CLC) system provides a closed loop link between the Clarios color measurement system and the Mercury remote ink control system for narrow web presses.



For more information, refer to *Closed Loop Control (CLC)* in this manual and the *Mercury Advanced User's Manual*.

1.7 Glossary of Basic Mercury Terms

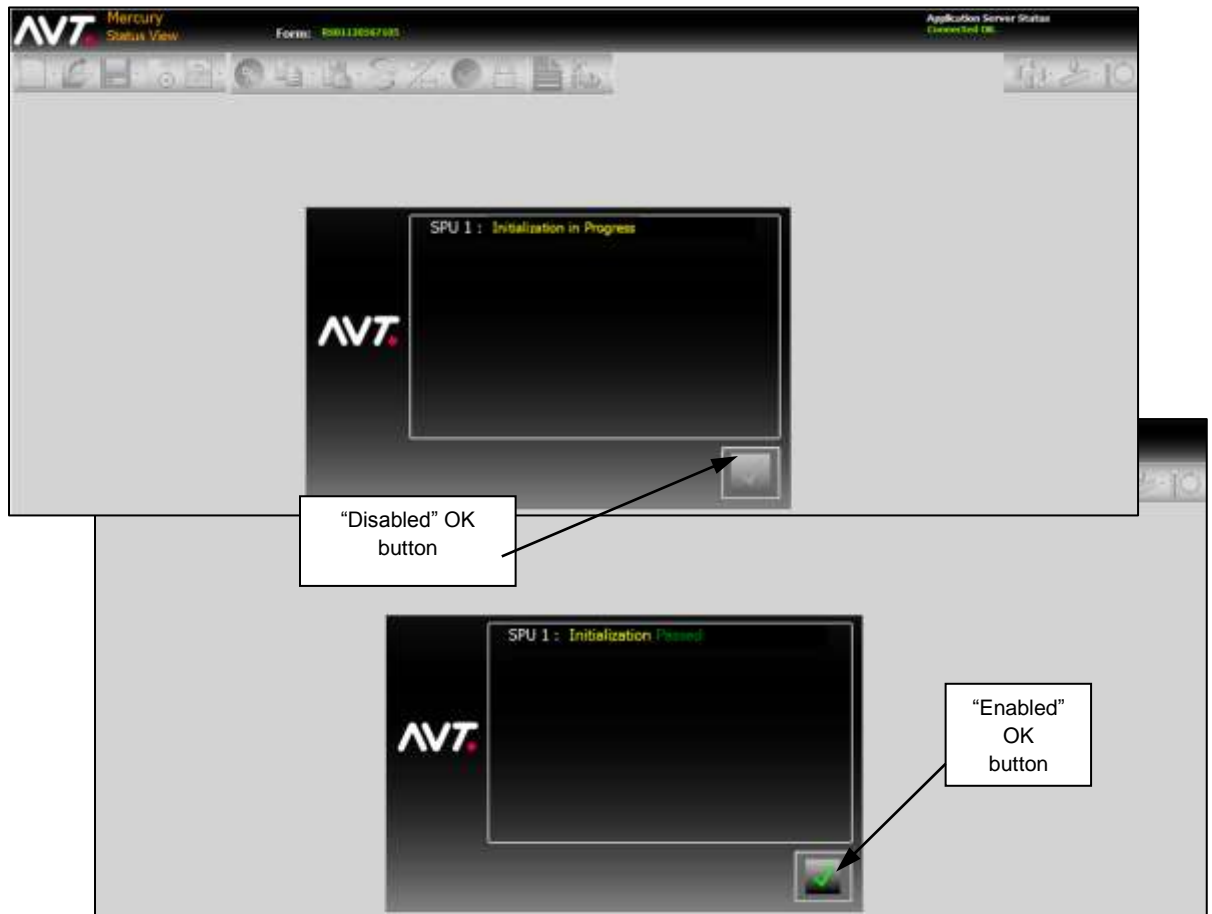
Term	Definition
Operator Console Unit (OCU)	A press console.
Application Server	Computer application used to communicate with all devices and other services, such as Mercury and Clarios components.
Servo Power Unit (SPU)	Supplies power to servo motors and communication to the Mercury computer.
Workstation	Computer with a Graphical User Interface (GUI) for operators.

2 Launching Mercury & Using Mercury Status View

This section explains how to launch the Mercury system and use the Status View on the Mercury workstation monitor.

2.1 Launch Mercury System

Turn on the Mercury workstation computer. The Mercury server and client applications will go through an initialization process and then start automatically.



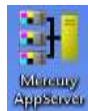
- The OK button is disabled when startup dialog shows initialization in progress.
- The OK button is enabled when startup dialog shows the status of the SPU's initialization (whether passed or failed).

Touch the **OK** button to acknowledge the initialization status. If the initialization fails, see "Troubleshooting System Startup" in the *Mercury Service Manual*.



If the product option “Prompt for Zero All Inkers” has been enabled on every restart of the server, you will be prompted to verify that you want to zero all inkers.

Touch  to zero all inkers.

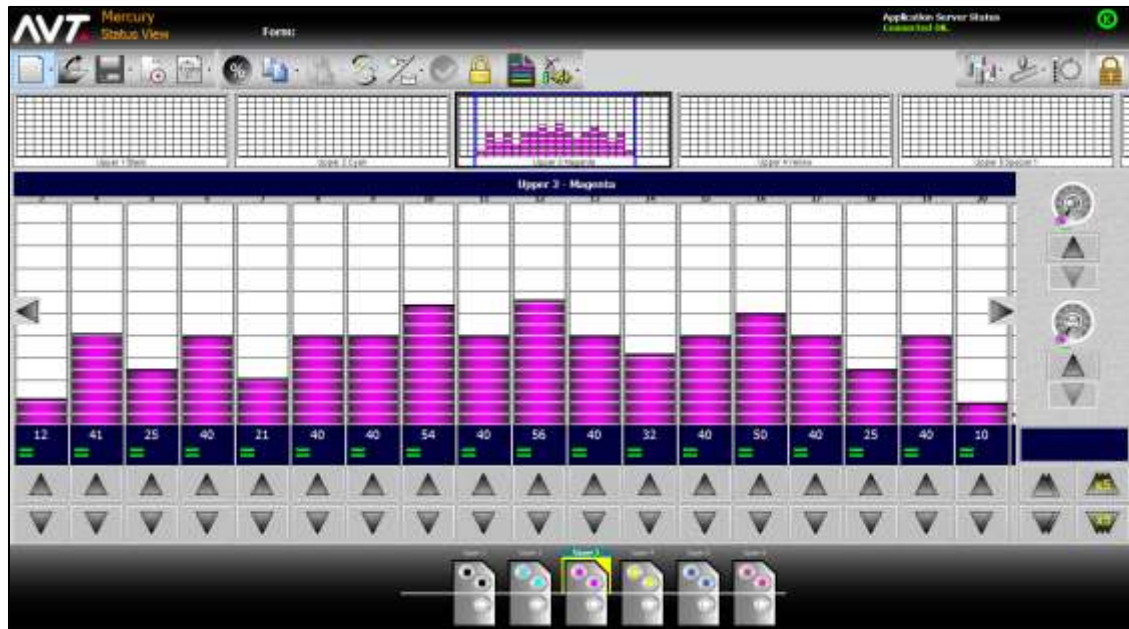


If the server application is not running, double-touch the **Mercury AppServer** icon on the desktop to start the server.



If the client application is not running, double-touch the **Mercury Client** icon on the desktop to start the client.

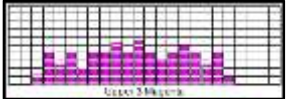


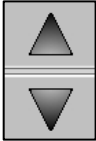
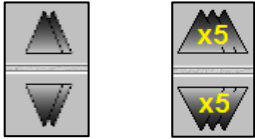


After the system and form data have been received, the Status View displays the form details on the Mercury workstation computer.



2.2 Use Touch-Sensitive Buttons, Icons, and Fields

Operators perform all Mercury system interactions by touching buttons, icons, and touch-sensitive fields on the Mercury workstation monitor.

Following are a few examples of Mercury buttons, icons, and fields.

	<p>Ink Fountain Thumbnail</p> <p>Touch to view ink zone settings and make ink zone adjustments for an ink fountain.</p> <p>Drag left or right to view other thumbnails.</p>
	<p>OK or Yes button</p> <p>Touch to indicate agreement with an action or operation.</p>
	<p>Color OK button</p> <p>Touch to save current ink profiles for a form.</p>
	<p>Adjust Up/Down buttons</p> <p>Touch to adjust a selected ink zone, sweep, or water.</p>
	<p>Adjust All Up/Down buttons</p> <p>Touch to adjust all ink zones / sweeps / waters by 1% or 5%.</p>
	<p>Next button</p> <p>Touch to go to the next step in process.</p>
	<p>Current Color Order button</p> <p>Touch to change the current color order.</p>

Note: An optional Operator Console Unit (OCU3) console can duplicate some of the controls on the Mercury touchscreen. See the *Operator Console Unit (OCU3) User's Manual* for detailed information.

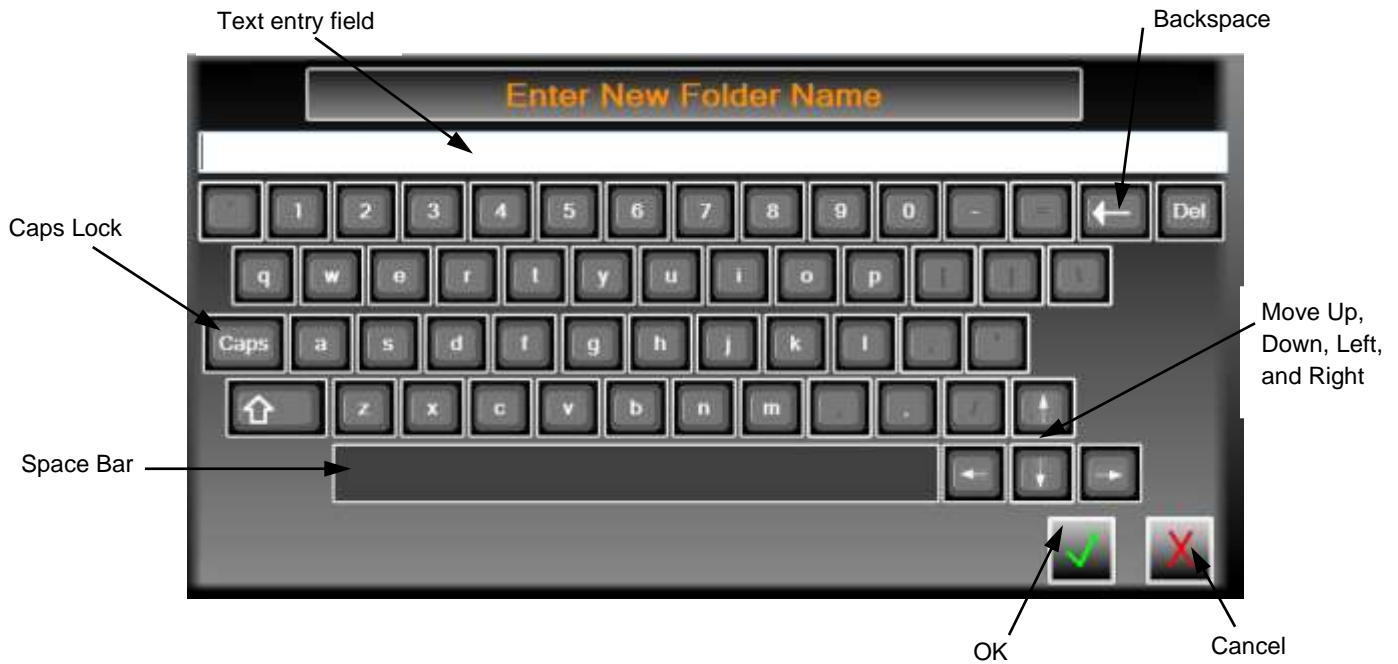
2.3 Use Keypads to Enter Information

You can enter information on the Mercury workstation monitor using the **Alpha Numeric Keypad** or the **Numeric Keypad**.

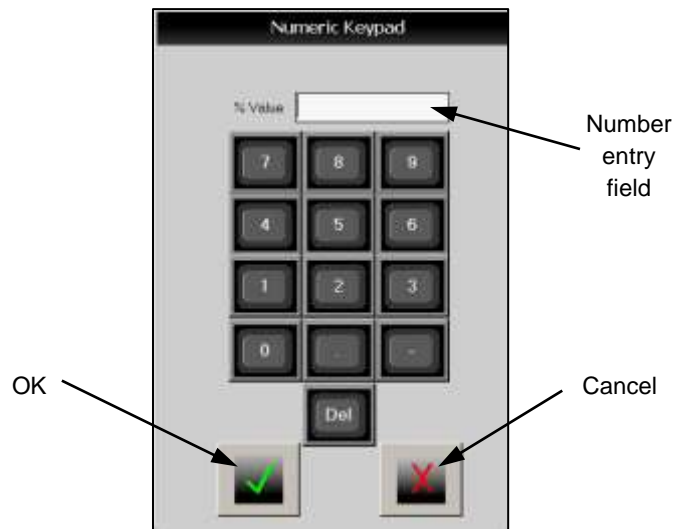
When you touch an area on the monitor that requires you to enter information, the appropriate keypad automatically displays. Touch the appropriate letters, symbols, or numbers on the keypad to enter the information.

Note: Any characters that are grayed out cannot be used.

Alpha Numeric Keypad



Numeric Keypad



2.4 Work with the Status View

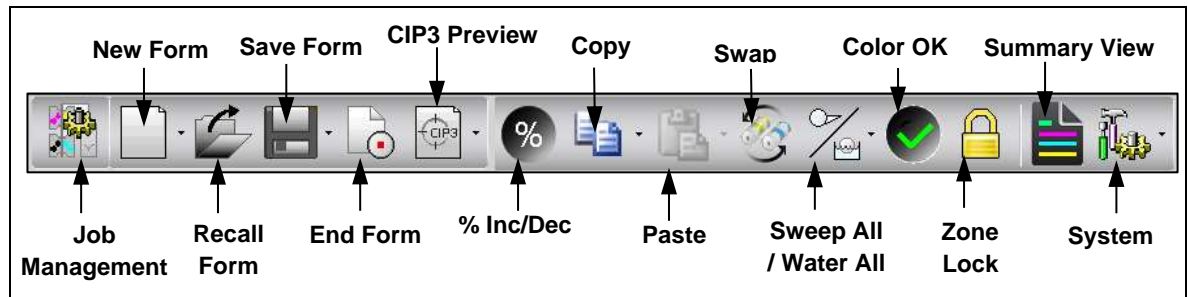
This section introduces the Mercury Status View.



2.4.1 Toolbars

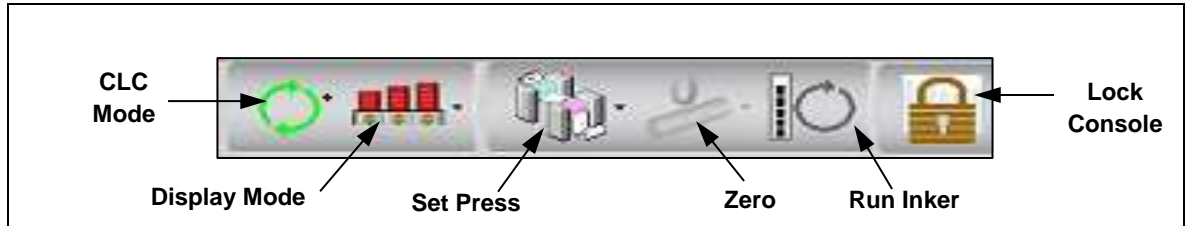
Main Toolbar Buttons

The main toolbar buttons, located at the top left section of the Status View, are the primary system function buttons.



Other Toolbar Buttons

Other toolbar buttons, located at the top right section of the Status View, are additional system function buttons.

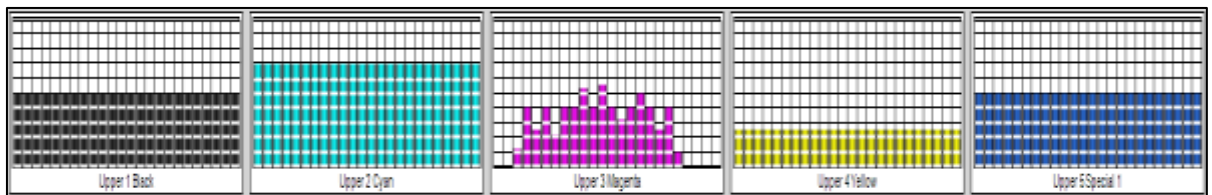


2.4.2 Ink Fountains

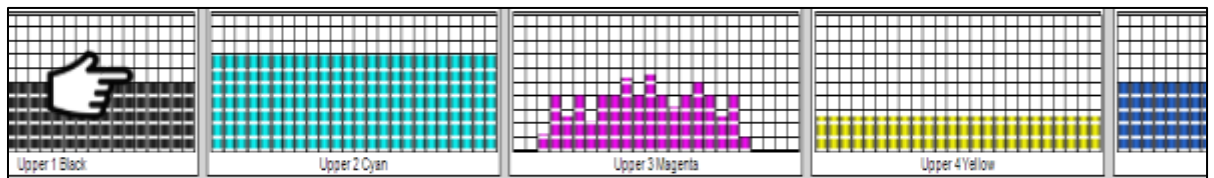
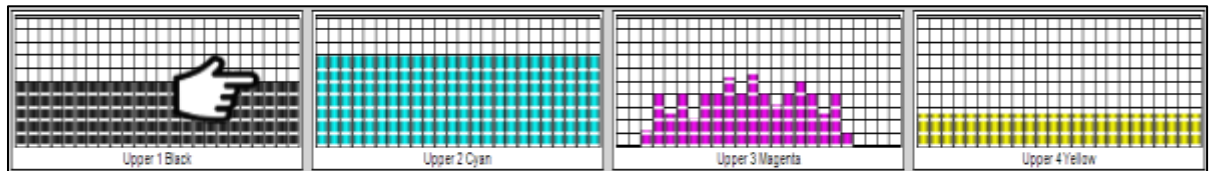
The Status View shows the ink fountains in two places, as thumbnails and as icons in the Press Graphical View. Touch an **ink fountain** to select it and make ink zone adjustments.

Thumbnails

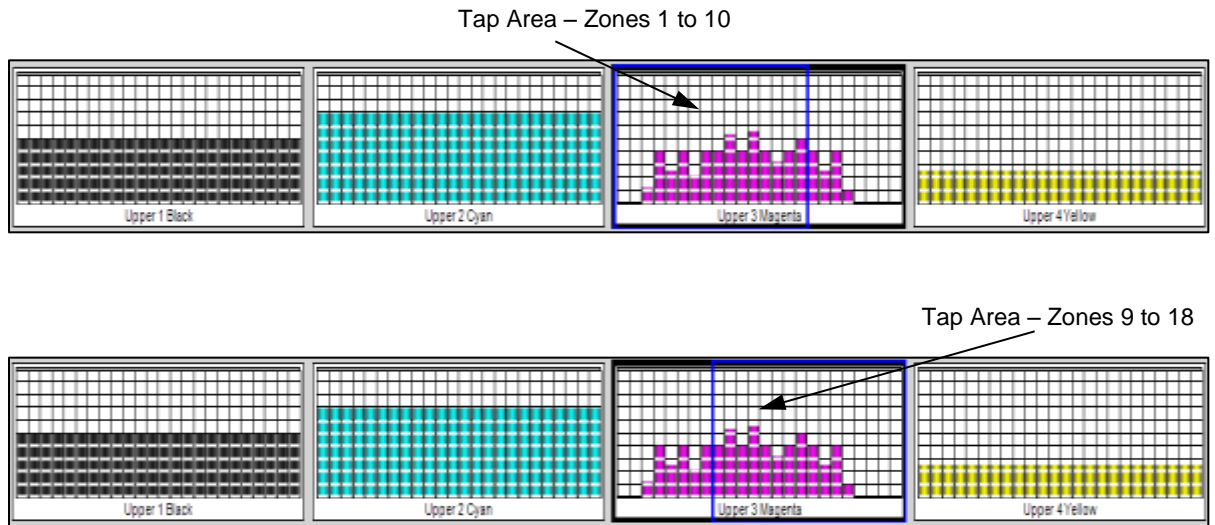
Ink fountains display as thumbnails under the main tool bar.



You can view up to six ink fountains at a time on the Status View. To view other ink fountains, use the **scroll feature** to drag thumbnails back and forth.



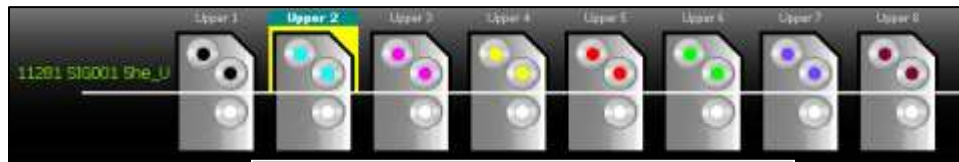
If the **Show Tap area feature** is enabled, you can tap in a thumbnail to center the selected ink fountain zones in the thumbnail. The tapped zone area displays with a blue border.



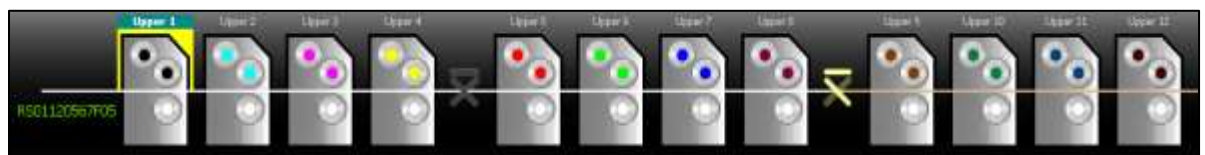
See the *Mercury Advanced User's Manual* for more detailed information on enabling the Show Tap area feature.

Press Graphical View

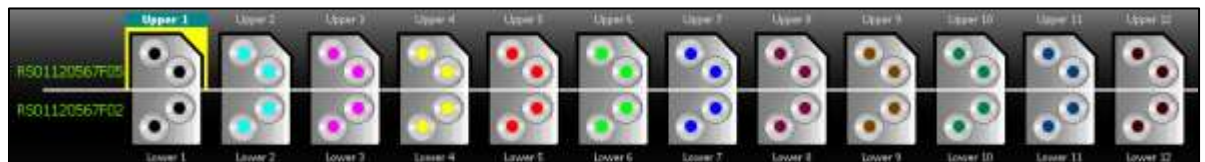
The ink fountains display as icons in the Press Graphical View at the bottom of the Status View.



Press Graphical View for Single-Sided Web



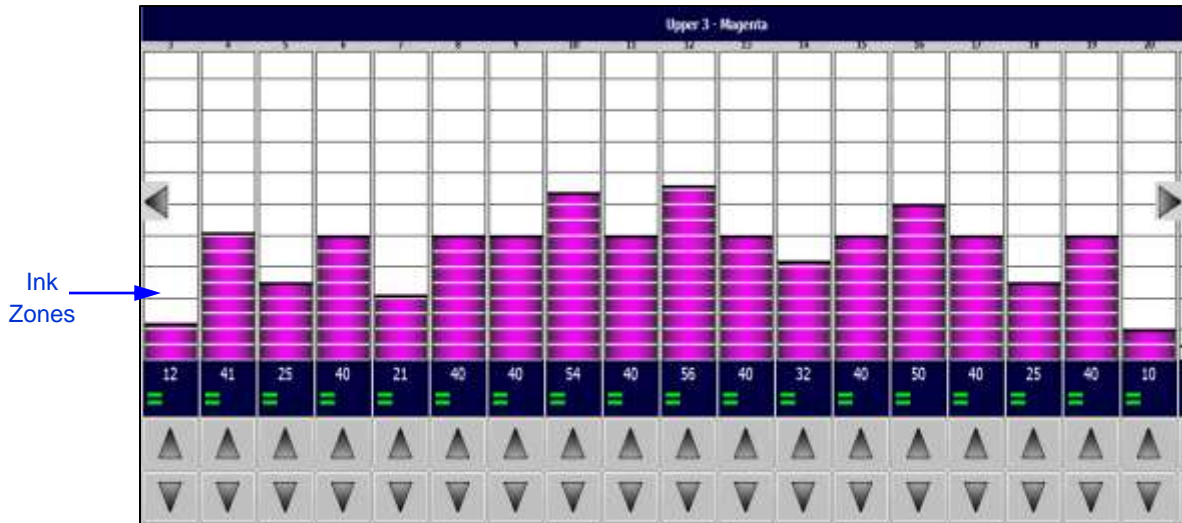
Press Graphical View for Single-Sided Web with Turn Bar



Press Graphical View for Two-Sided Web

2.4.3 Ink Zones

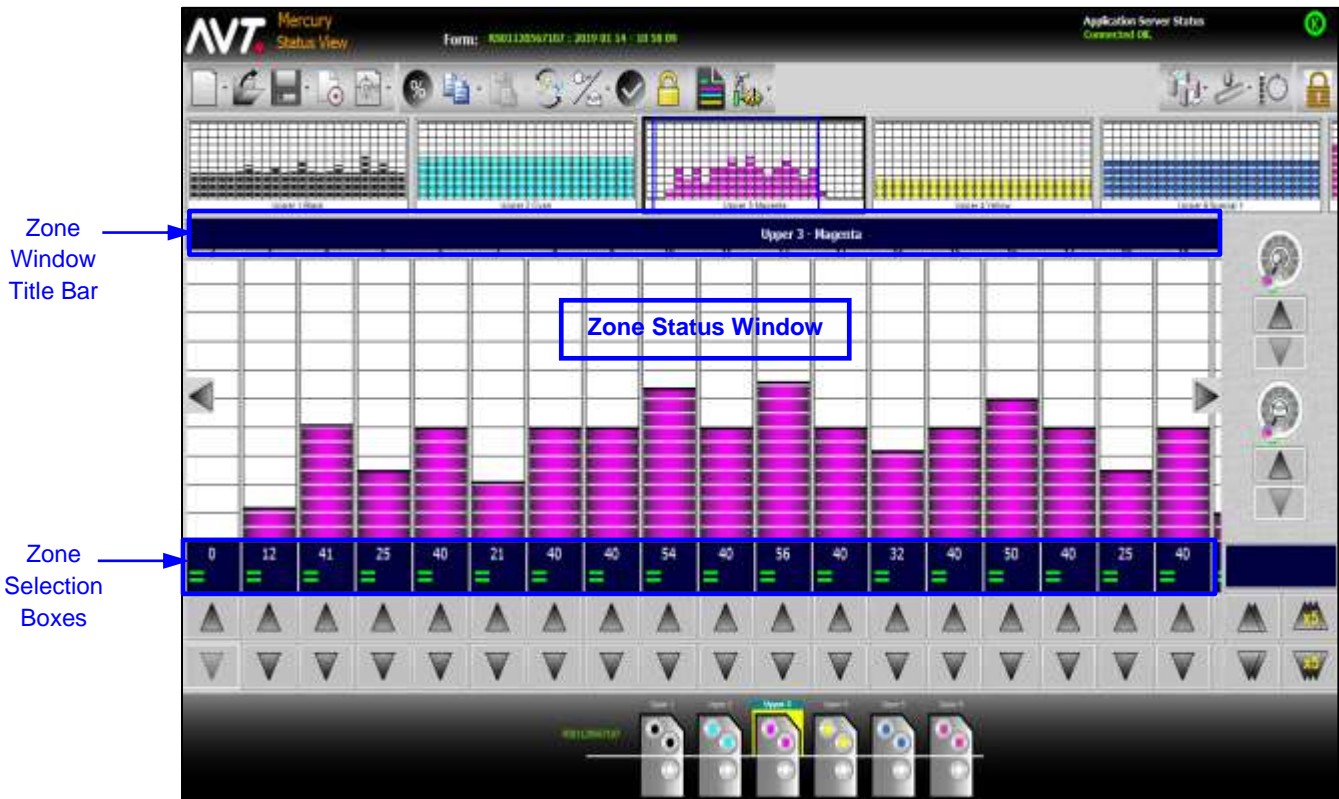
The current ink zones for the selected ink fountain display on the Status View.



Note: You can change the number of ink zones that display on the Status View. See the *Mercury Advanced User's Manual* for more detailed information.

Drag Ink Zones on Status View

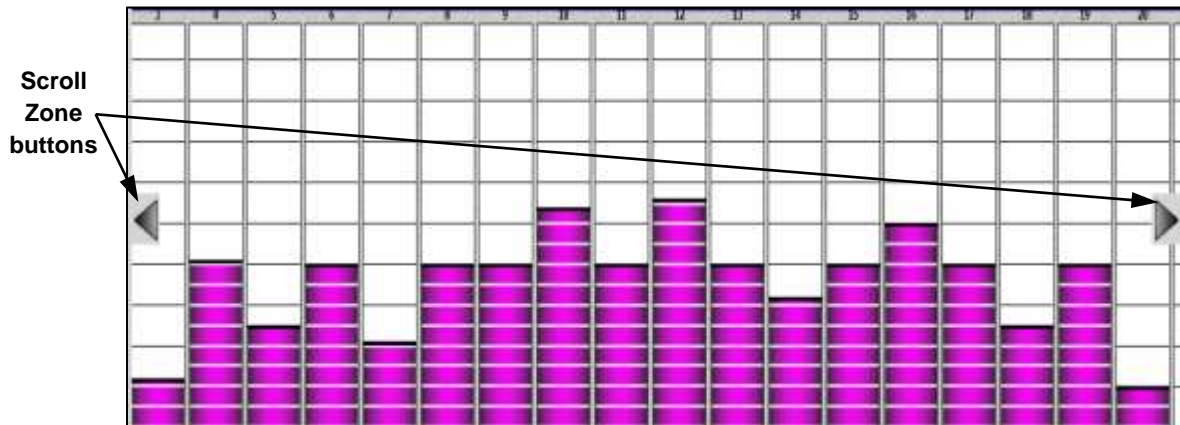
There are three areas where you can drag the ink zones on the Status View.



Zone Status Window	Dragging in this area in a horizontal direction (left-to-right or right-to-left) scrolls the zones displayed. Use this to quickly change the zones shown on the screen, when fewer than all possible key zones are displayed.
Zone Window Title Bar	Dragging this control area left or right, adjusts the zones that will be displayed on the Status View.
Zone Selection Boxes	Dragging on multiple zones in this area in a horizontal direction (left-to-right or right-to-left) selects each of the individual zones touched.

Scroll Zone Buttons

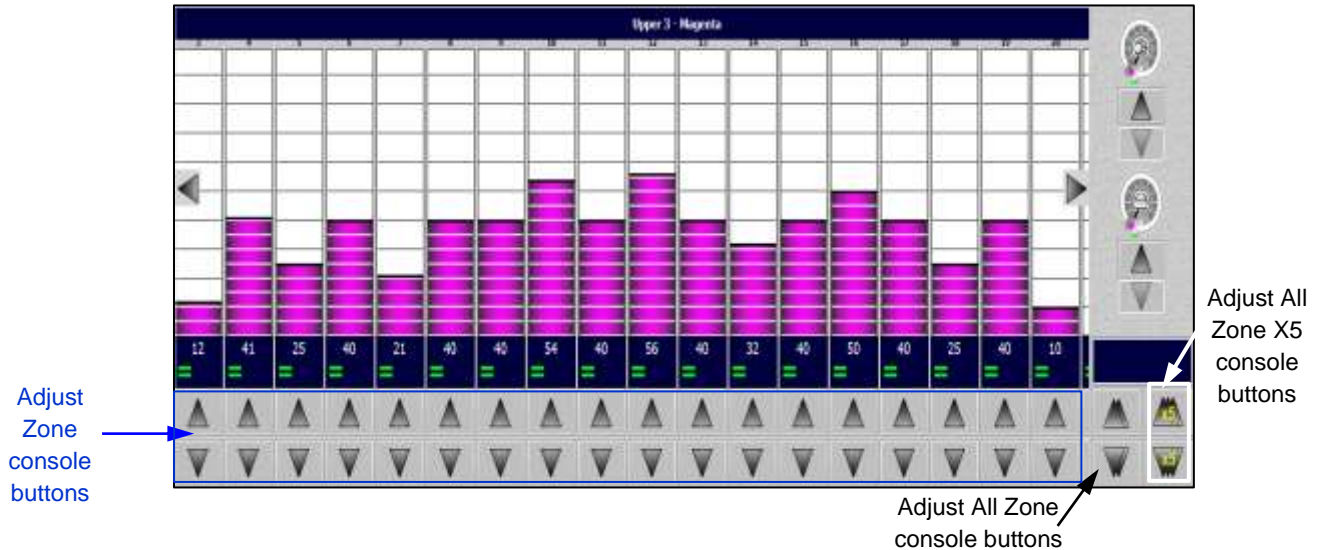
You can drag across the zones to scroll or use the scroll zone buttons.



Note: Displaying the scroll zone buttons is optional. See the *Mercury Advanced User's Manual* for more detailed information.

Ink Zone Console Buttons

Two types of ink zone console buttons are located at the bottom of the Status View.



Use the **Adjust Zone** buttons, located directly under each ink zone, to adjust the corresponding ink zone.



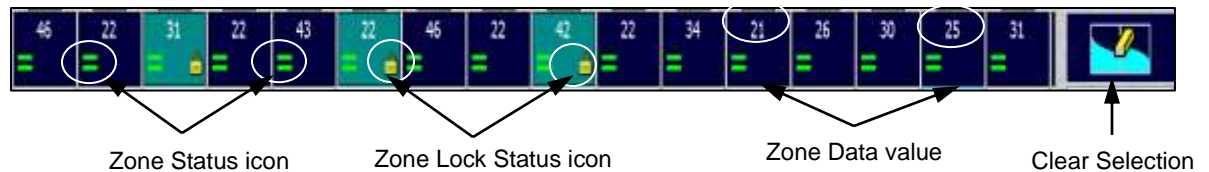
Use the **Adjust All Zone** buttons, located to the right of the Adjust Zone buttons, to adjust all ink zones by 1% at the same time.



Use the **Adjust All Zone X5** buttons, located to the right of Adjust All Zone buttons, to adjust all ink zones by 5% at the same time.

Ink Zone Data Display

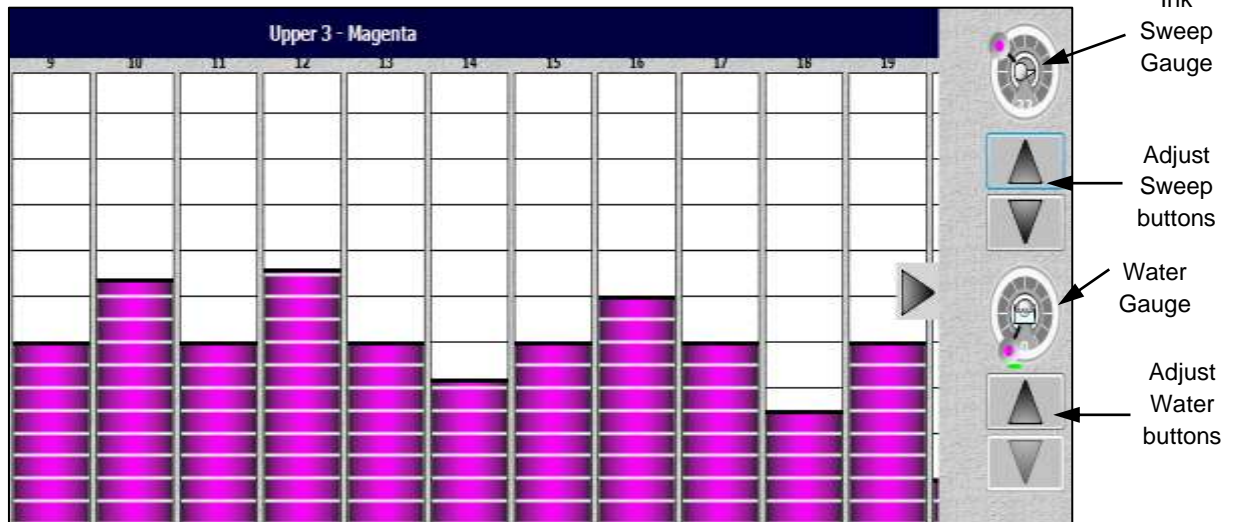
The ink zone data display area located directly under the ink zones on the Status View, provides feedback on each ink zone setting.



- The **selected zones** appear as light blue.
- The upper half of each display area shows the two-digit **Zone Data value**.
- The lower left quadrant of each display area shows the **Zone Status icon**. See [Appendix A – Zone Status Icons](#) for the list of all possible zone status icons.
- The lower right quadrant of each display area shows the **Zone Lock Status icon**. The **Clear Selection** button, located to the right of the ink zone display area, displays when one or more ink zones are selected. Use this button to deselect the selected ink zones.

2.4.4 Ink Sweep and Water Controls

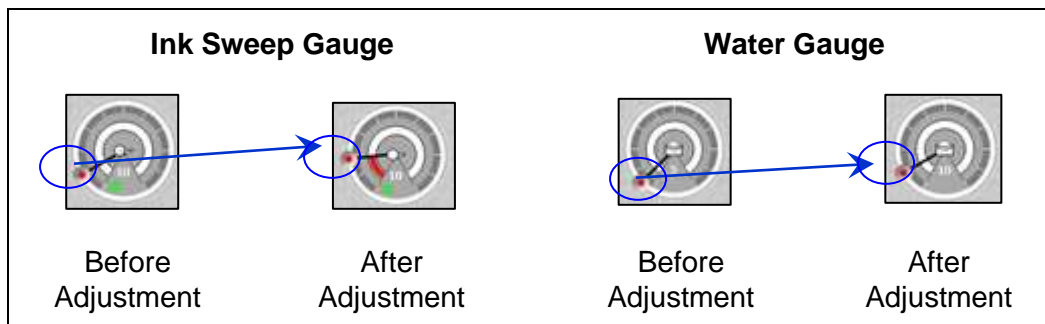
The Ink Sweep and Water control gauges and buttons are located to the right of the ink zones on the Status View.



Note: The Ink Sweep and Water gauges and buttons are enabled only when the system configuration indicates they are enabled. The gauges and buttons are grayed out when disabled.

Ink Sweep and Water Gauges

Touch and move the **slider button** on the Gauge to adjust the value.



Adjust Sweep and Adjust Water Buttons



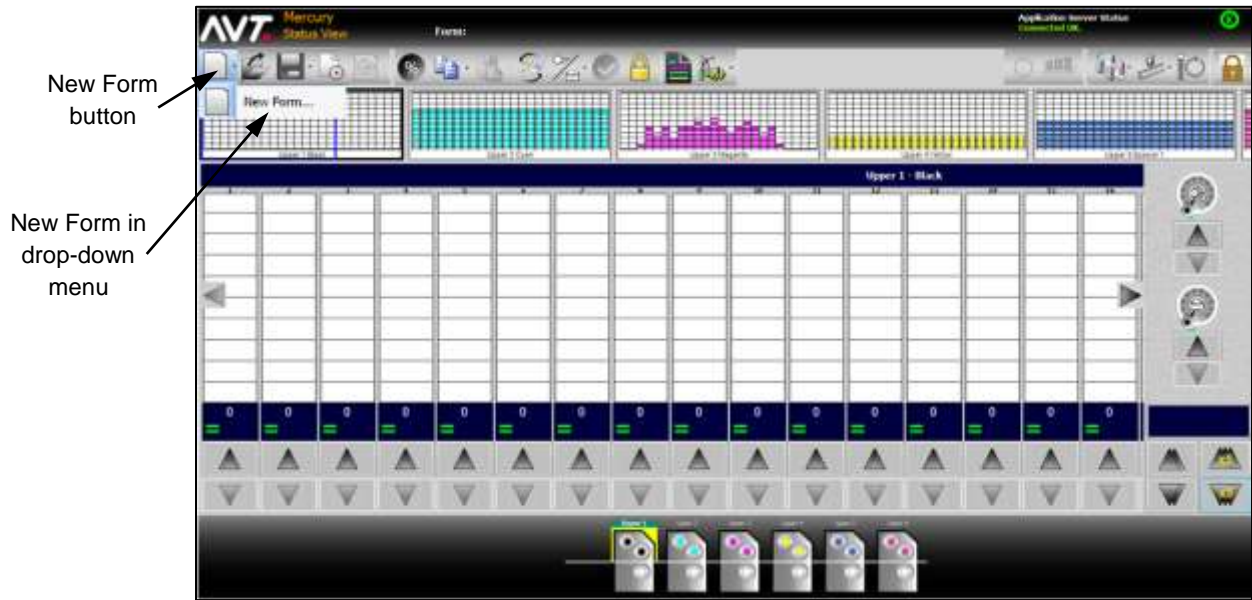
Use the **Adjust Sweep** and **Adjust Water** buttons (**Up** or **Down**), located directly under the gauges, to adjust their values.

3 Setting Up Mercury Forms


This section introduces the basic elements of the Mercury system that you can use to set up a Mercury form.

3.1 Set Up a New Form

You set up a new form from the Status View.

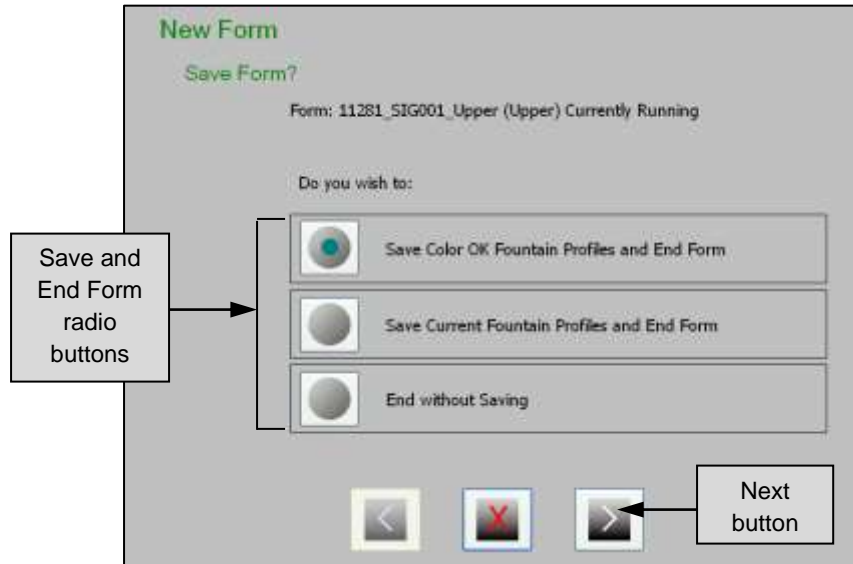


3.1.1 Starting a Form

- 1 Touch the **New Form** button () on the main toolbar and then touch **New Form** from the drop-down menu.

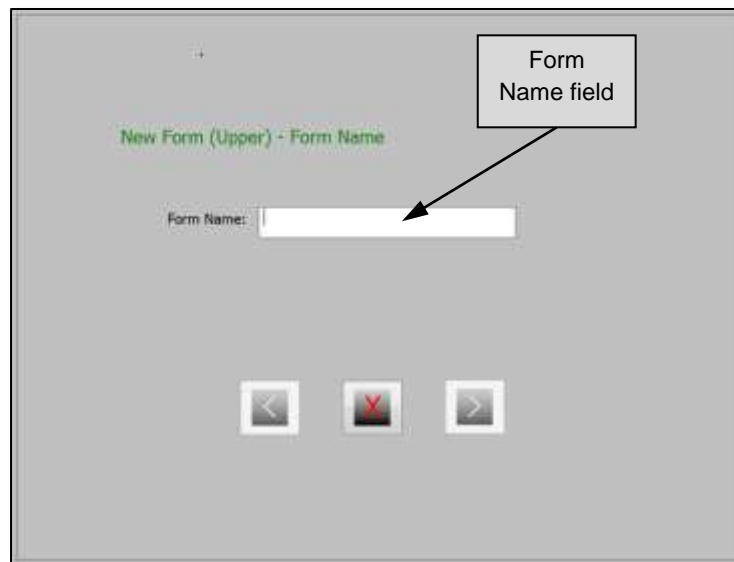


If another form is running when you touch the **New Form** button, the New Form screen displays asking if you want to save the form.




2 Touch the appropriate **Save/End** radio button to indicate how to save and end the currently running form, and then touch the **Next** button.

3 On the New Form - Form Name screen, specify a new form name in the **Form Name** data entry field.



4 Continue with [Specify a New Form Name](#) to enter a new form name.

Specify a New Form Name

<p>1</p>	<p>Touch anywhere in the Form Name data entry field on the New Form - Form Name screen and the Form Name alphanumeric keypad displays.</p> 
<p>2</p>	<p>Touch the appropriate letters, symbols, and/or numbers to enter form name.</p>
<p>3</p>	<p>Touch the OK button to save the form name and return to the New Form - Form Name screen.</p>
<p>4</p>	<p>Touch the Next button to continue with Specifying the Color Order.</p>

3.1.2 Specifying the Color Order

When setting up a form, you can choose the standard or custom color order. After touching **Next** on the New Form - Form Name screen, the Color Order dialog displays.



<p>1</p>	<p>Touch the Next button to use the default Standard Color Order.</p>
<p>2</p>	<p>When the confirmation dialog displays, touch the OK button to save the form and return to the Status View.</p>

See the *Mercury Advanced User's Manual* for information on creating and using custom colors, and also changing the current color order.

3.2 Save a Form

You save a form from the Status View.



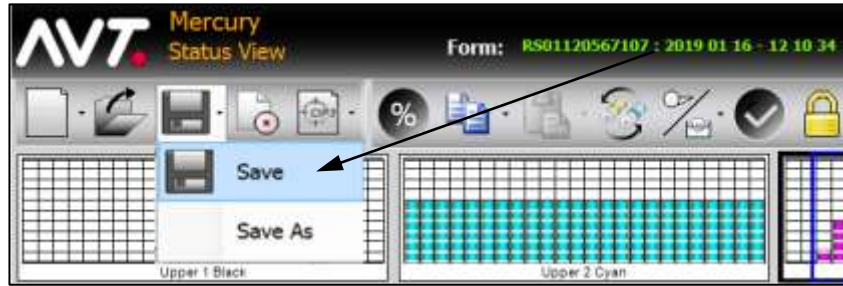
Touch the **Save a Job or Form** button on the main toolbar.

You can choose to save a form with the current form name or with a new form name.

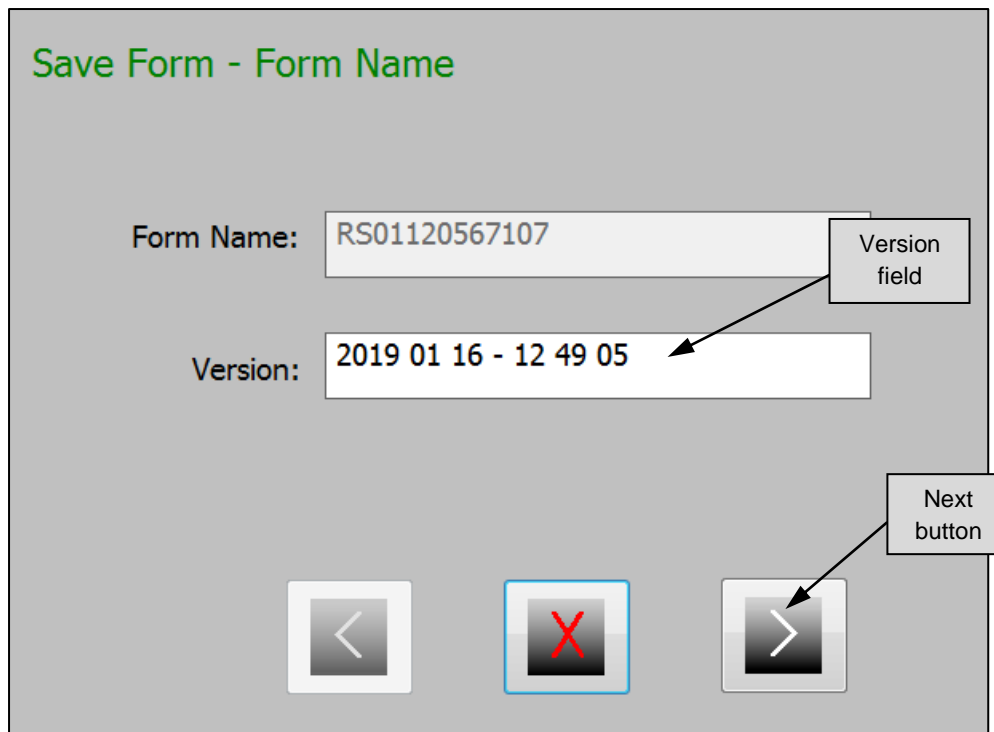
- To save a form using the current form name, follow the steps in [Saving a Form with Current Form Name](#).
- To save a form using a new form name, follow the steps in [Saving a Form with a New Form Name](#).

3.2.1 Saving a Form with Current Form Name

- 1 Touch **Save** from the Save Form drop-down menu.



The Save Form - Form Name screen displays.



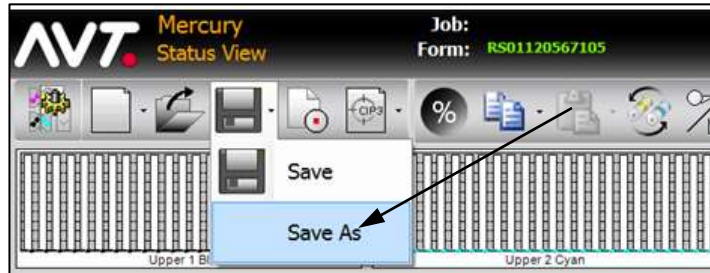
- 2 Accept the default form version or touch anywhere in the **Version** data entry field to enter a new version for the form.

Note: The default version is date/time in **yyyy mm dd – hh mm ss** format.

- 3 Touch the **Next** button and continue with [Choosing a Storage Option](#).

3.2.2 Saving a Form with a New Form Name

- 1 Touch **Save As** from the Save Form drop-down menu.



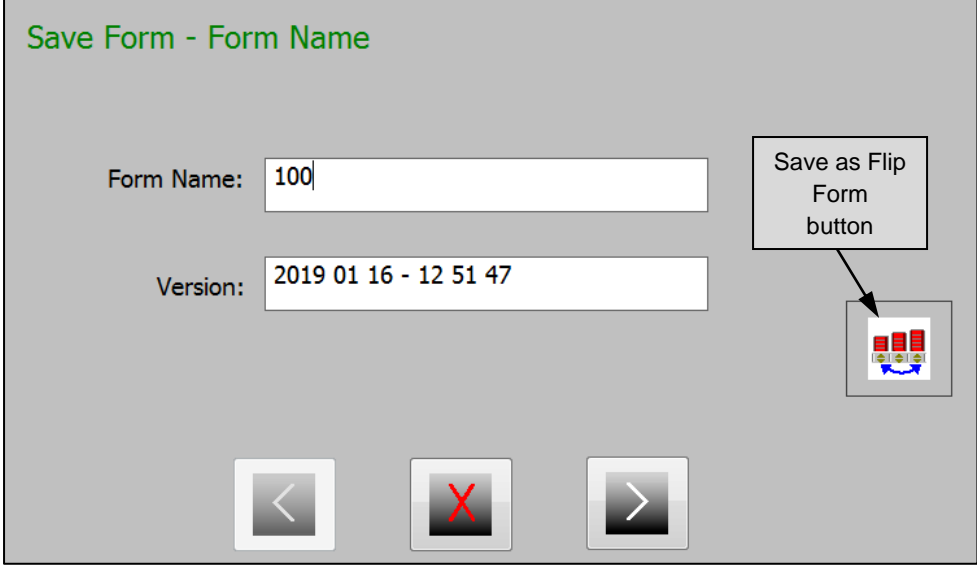
The Save Form - Form Name screen displays.

The screenshot shows the 'Save Form - Form Name' screen. It has a title 'Save Form - Form Name' in green. Below the title are two input fields: 'Form Name:' and 'Version:'. The 'Version:' field contains the text '2019 01 16 - 12 51 47'. At the bottom, there are three buttons: a back button (left arrow), a cancel button (red X), and a next button (right arrow). Callouts with arrows point to the 'Form Name field', 'Version field', and 'Next button'.

- 2 Touch anywhere in **Form Name** data entry field and enter new form name.
- 3 Accept the default form version or touch anywhere in the **Version** data entry field to enter a new version for the form.
Note: The default version is date/time in **yyyy mm dd – hh mm ss** format.
- 4 Touch the **Next** button and continue with [Choosing a Storage Option](#).

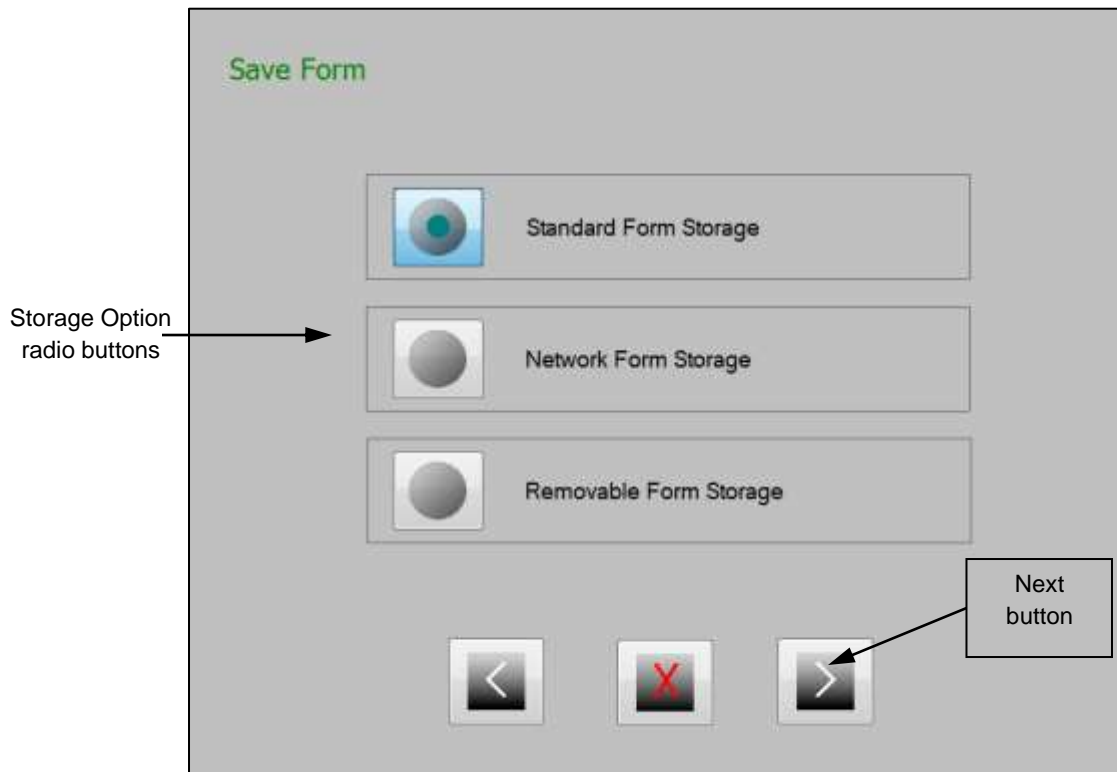
3.2.3 Saving a Form with Flip Form Option

You can use the **Save As Flip Form** option to create a mirror image of an existing form's profile.

1	Follow the steps for Saving a Form with a New Form Name for the one side of a printed image.
2	Follow the steps for Recall a Form to recall the first image. 
3	When the Save Form - Form Name screen displays, click on the Save as Flip Form button to save the profile stored in reverse.

3.2.4 Choosing a Storage Option

After touching **Next** on the Save Form - Form Name screen, the Save Form screen displays.

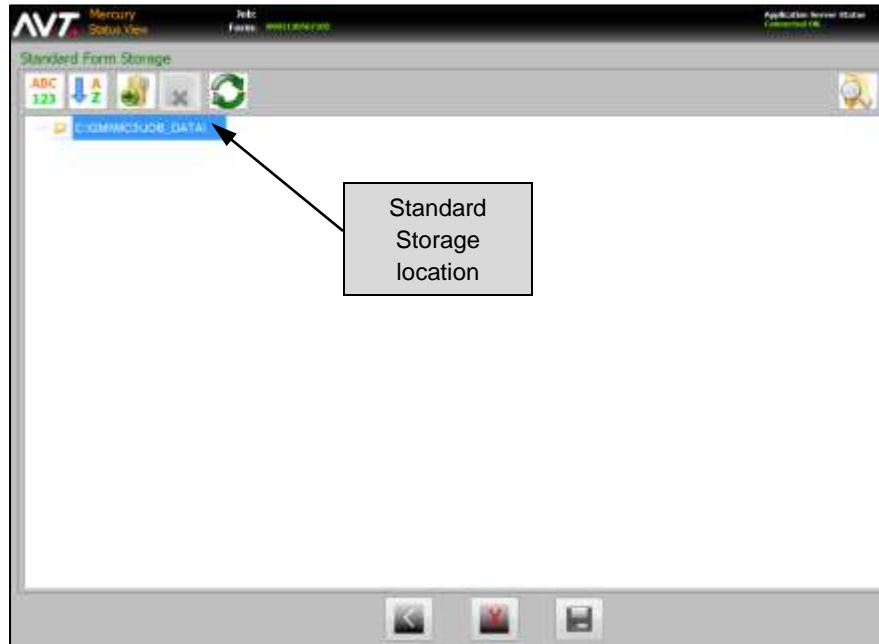


The following storage options are available.

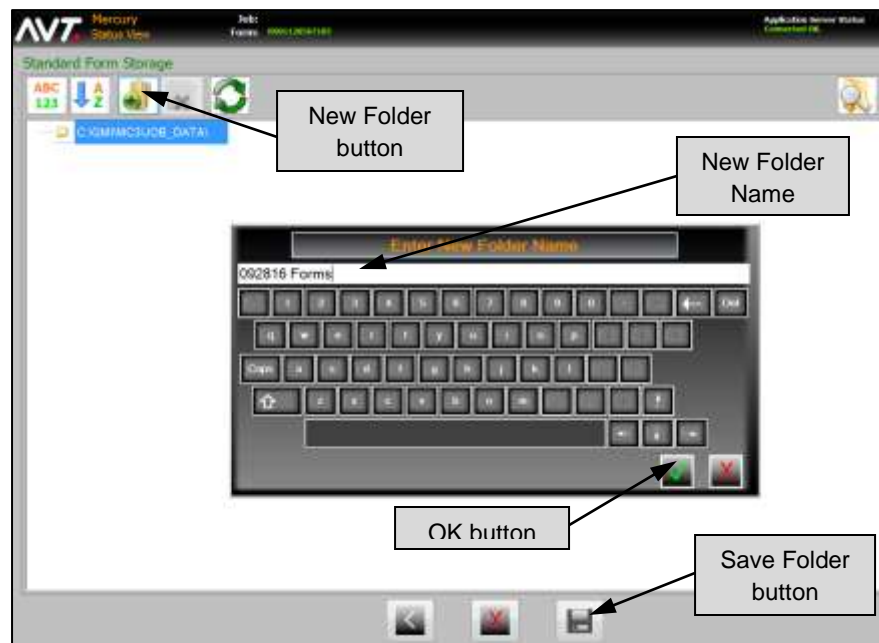
- **Standard Form Storage** (default) - Saves form on the computer's hard disk. Follow the steps for [Save Form to Standard Form Storage](#).
- **Network Form Storage** - Saves form on the configured storage area on the network. Follow the steps for [Save Form to Network Form Storage](#).
- **Removable Form Storage** - Saves form on the thumb-drive or other removable media plugged into the computer. Follow the steps for [Save Form to Removable Form Storage](#).

Save Form to Standard Form Storage

- 1 Touch the **Standard Form Storage** radio button and then touch the **Next** button. The Standard Form Storage dialog displays.



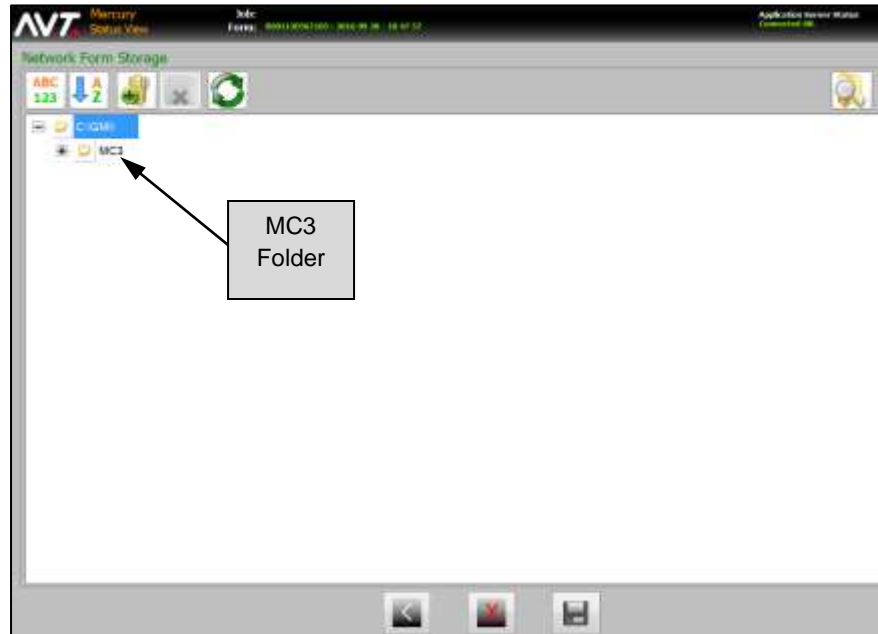
- 2 Touch the **New Folder** button, enter a new folder name, and touch the **OK** button.



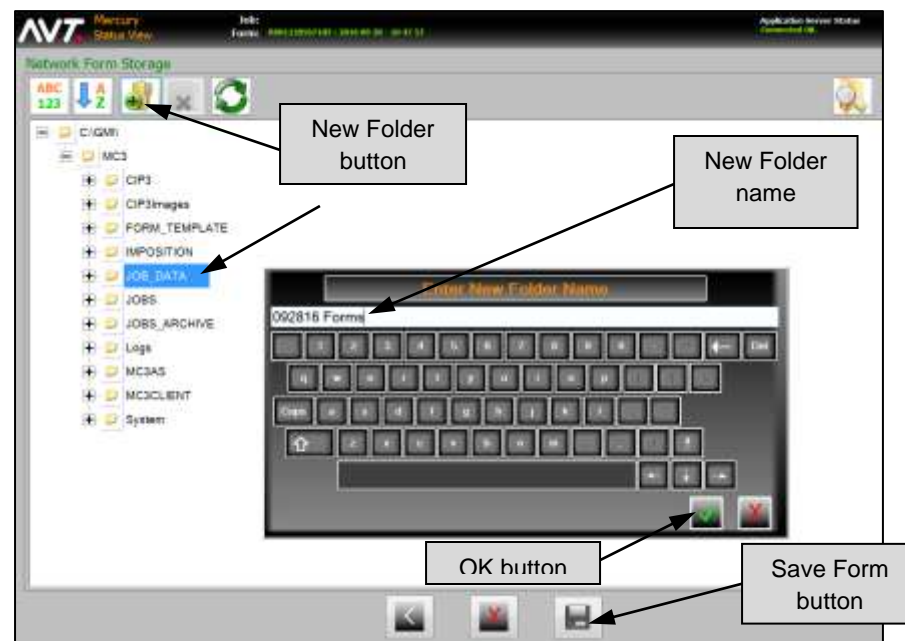
- 3 Touch the **Save Folder** button and then touch the **OK** button to confirm.

Save Form to Network Form Storage

- 1 Touch the **Network Form Storage** radio button and then touch the **Next** button. The Network Form Storage dialog displays.



- 2 Expand the **MC3** folder, touch the **Job_Data** folder and then the **New Folder** button, enter a new folder name, and touch the **OK** button.

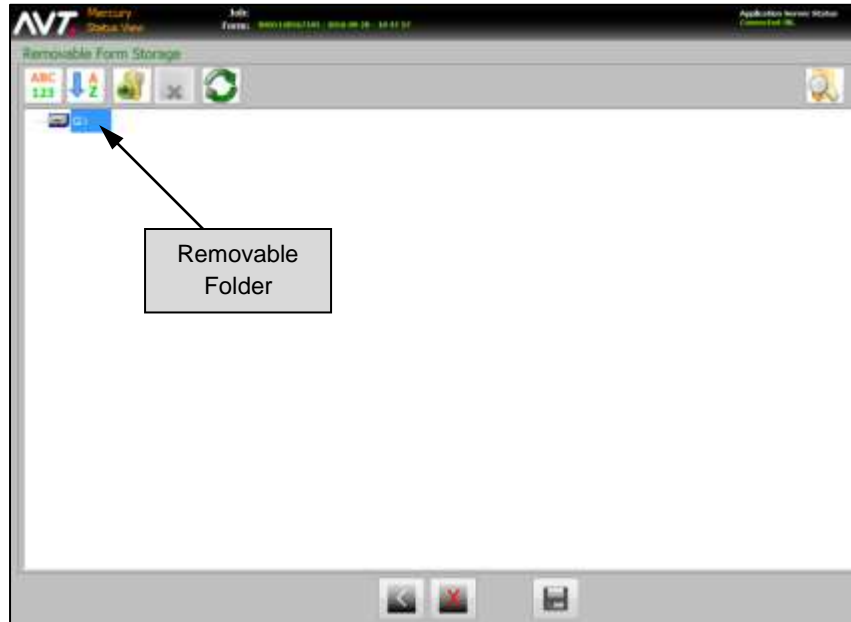


- 3 Touch the **Save Form** button and then touch the **OK** button to confirm.

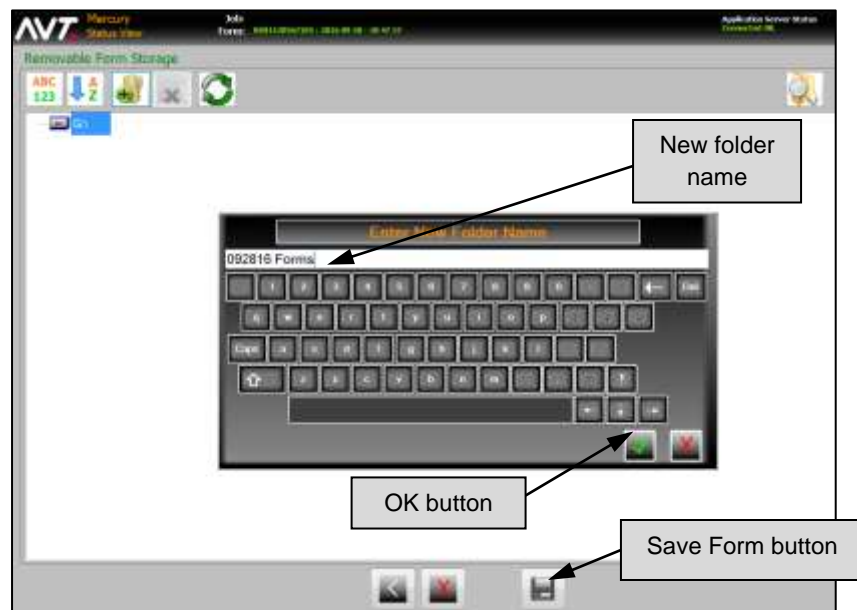
Save Form to Removable Form Storage

- 1 Touch the **Removable Form Storage** radio button and then touch the **Next** button. The Removable Form Storage dialog displays.

Note: Make sure that a removable storage device is accessible before choosing the Removable Form Storage button.



- 2 Touch the removable folder (**G:** in this example) and then the **New Folder** button, enter a new folder name, and touch the **OK** button.



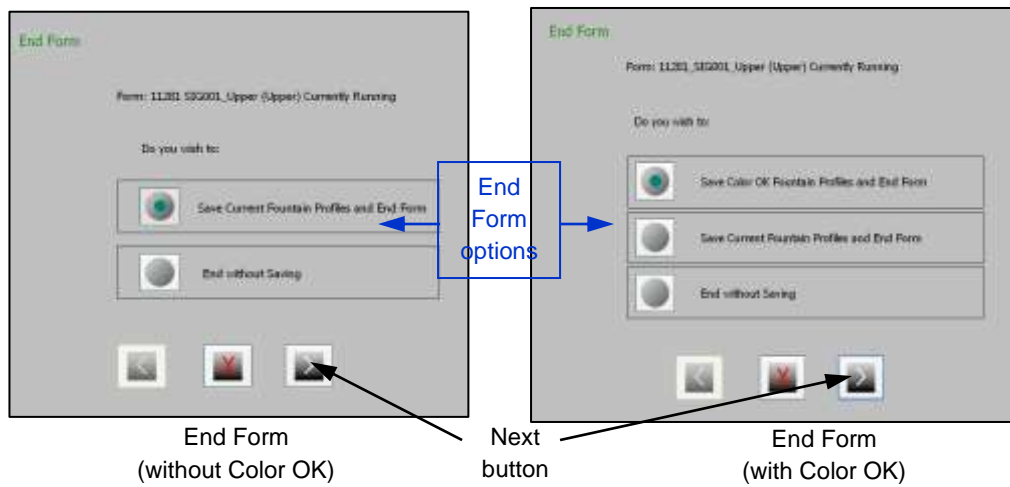
- 3 Touch the **Save Form** button and then touch the **OK** button to confirm.

3.2.5 Ending a Form

You end a form from the Status View.



- 1 Touch the **End Form** button on the main toolbar. The End Form screen displays the end form options.



<p>2</p>	<p>Touch the Save Color OK Fountain Profiles and End Form, Save Current Fountain Profiles and End Form, or End without Saving radio buttons and then touch the Next button.</p> <ul style="list-style-type: none"> • If you choose Save Color OK Fountain Profiles and End Form or Save Current Fountain Profiles and End Form, continue with step 3. • If you choose End without Saving, touch the OK button. <p>Note: If you have not touched the Color OK button, you will only see two options on the End Form screen.</p>
<p>3</p>	<p>If you haven't already saved the form, when the Save Form screen displays for you to save it, touch the OK button to confirm.</p>

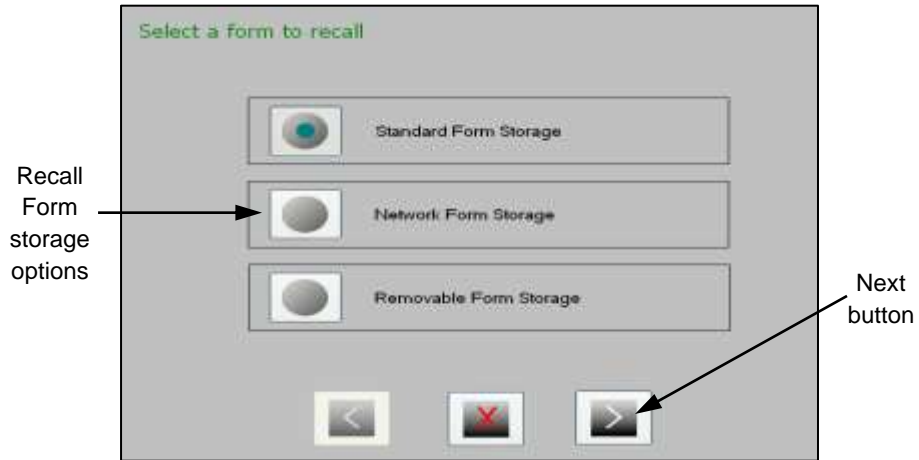
3.3 Recall a Form

You can recall a form from the Status View.



<p>1</p>	<p>Touch the Recall Form button on the main toolbar.</p> <p>If another form is running, the Recall Form screen displays asking if you want to save the form. After touching the appropriate Save/End radio button, continue touching the Next buttons to end and save the form.</p>
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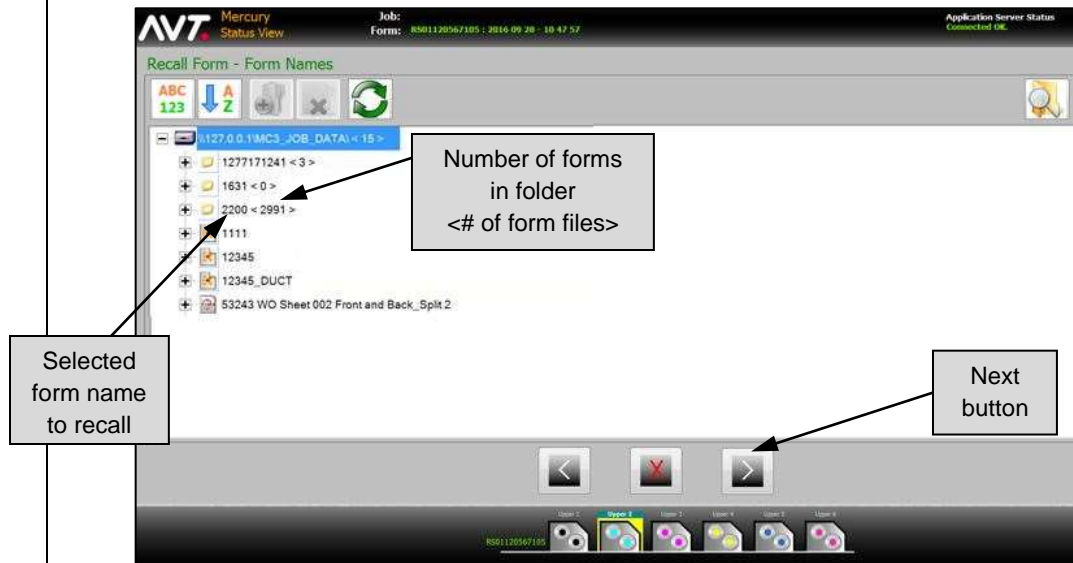
The Select a Form to Recall screen displays locations where the forms are stored.



- 2 Touch the appropriate **Form Storage** radio button to indicate where the form is stored and then touch the **Next** button.

The Recall Form - Form Names screen displays a list of stored forms. The number of forms in the folder displays next to the folder name, between angle brackets. If the form name has multiple versions, expand the **Form Name** folder to view versions.

See [Using Form View Screens](#) for detailed information on the features of the Form view screens.

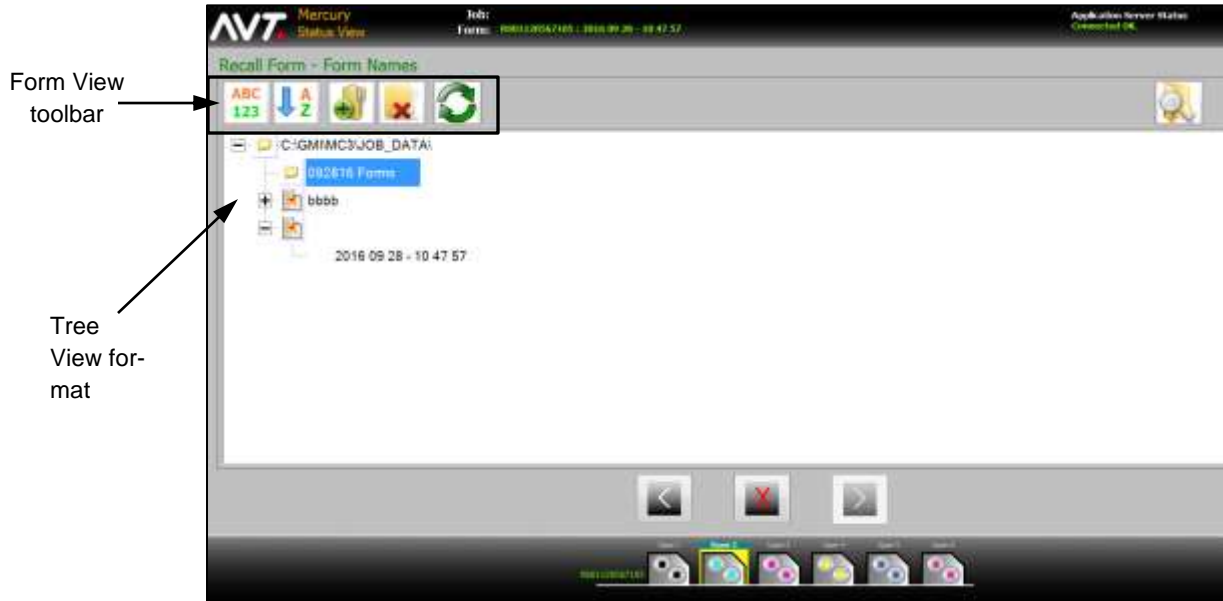


- 3 Locate the **Form Name** to recall and then touch the **Version**.
- See [Searching for Folder and Form Names](#) for detailed information on the folders and forms search function.

- 4 Touch the **Next** button and then touch the **OK** button to confirm.

3.3.1 Using Form View Screens

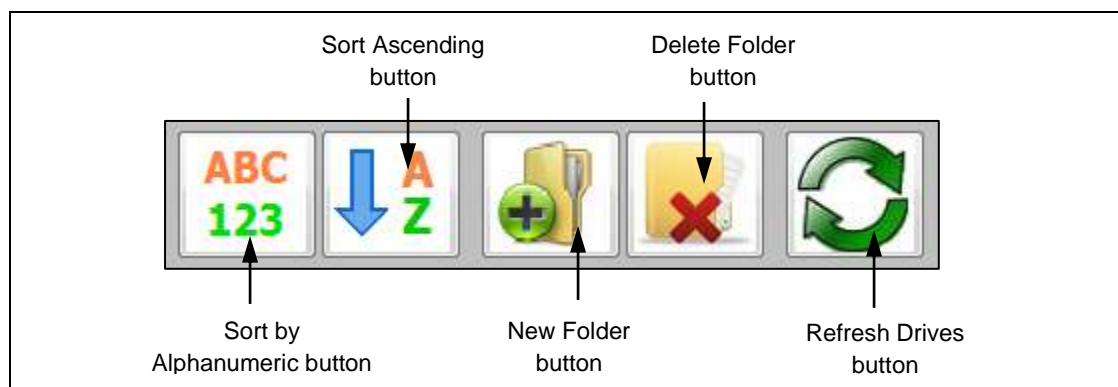
The Form view screens display folders and forms in a tree view format. These screens include a toolbar at the top that provides numerous functions including sorting, adding/deleting folders, refreshing the tree view, and searching by a filter string.



You can scroll the tree by dragging inside the window itself, rather than using a scroll bar. A vertical and/or horizontal scroll bar is presented during the dragging operation to allow for the size of the list being dragged.





See [Searching for Folder and Form Names](#) for detailed information on the search function.

Form View Toolbar





Sort by Filename/Time and Ascending/Descending Order


You can sort by filename or by time, and in ascending or descending order.

 	Click on the Sort by Alphanumeric button, which is a button that toggles between sorting by filename or by time.
 	Click on the Sort Ascending button, which is a button that toggles between sorting in ascending or descending order.

Create and Delete Folders

	Click on the New Folder button and the Enter New Folder Name keyboard displays for you to enter the folder name.
	Click on the Delete Folder button to delete a selected folder.

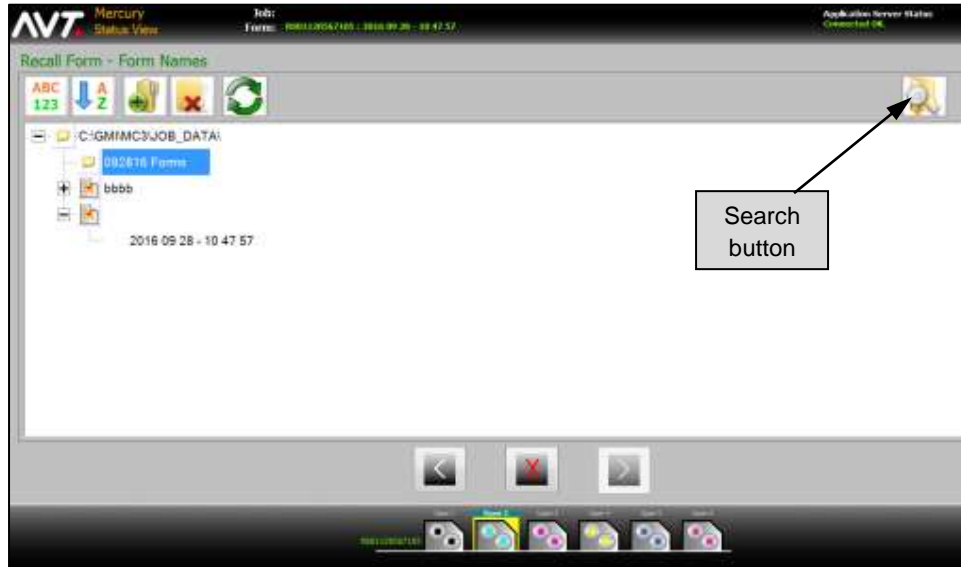
Refresh Tree View

	Click on the Refresh Drives button to update the tree view. (This is used when removable drives are added or removed during this operation.)
---	--

3.3.2 Searching for Folder and Form Names


When there is a long list of folders and forms to choose from, you can use the search filtering feature to shorten the list.

- 1 Click on a folder to search and then click the **Search** button.



The Search keypad displays for you enter a search term string. A **keyboard** button also displays next to the Search button on the Form view.

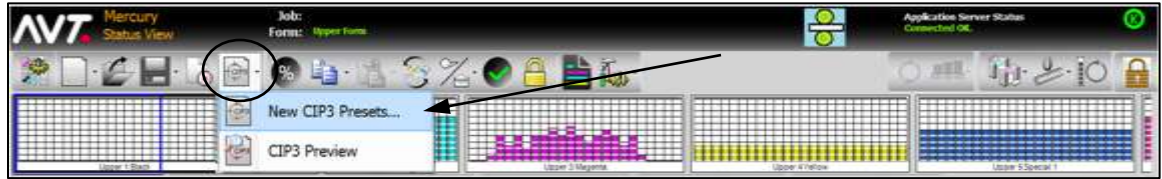


- 2 Enter your **search term string** and click on the  button.
Files in the currently selected folder are matched to the full search term string and are presented in the tree view

Note: To modify or disable Search function, see *Mercury Advanced User's Manual*.

3.4 Set Up CIP3 Presets

You can use the optional CIP3 Presets feature to configure presetting for all of the inkers on the press. You set up CIP3 presets by selecting **New CIP3 Presets** from the **CIP3** drop-down on the Status View.



Note: The example screen dialogs in the sections below are for a single web.

3.4.1 Overview of New CIP3 Presets Wizard

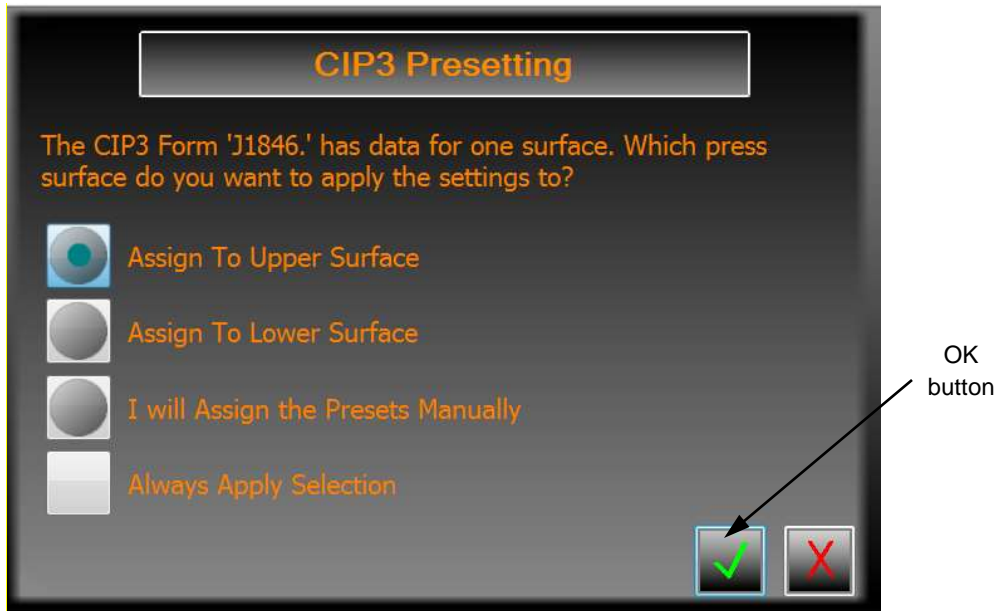
The CIP3 wizard guides you through the process of assigning and applying new CIP3 presets. When choosing **New CIP3 Presets**, the first page of the CIP3 Presetting wizard displays.



The **press area** allows you to assign preset data to an inker and view the image for the preset data assigned to the inker.

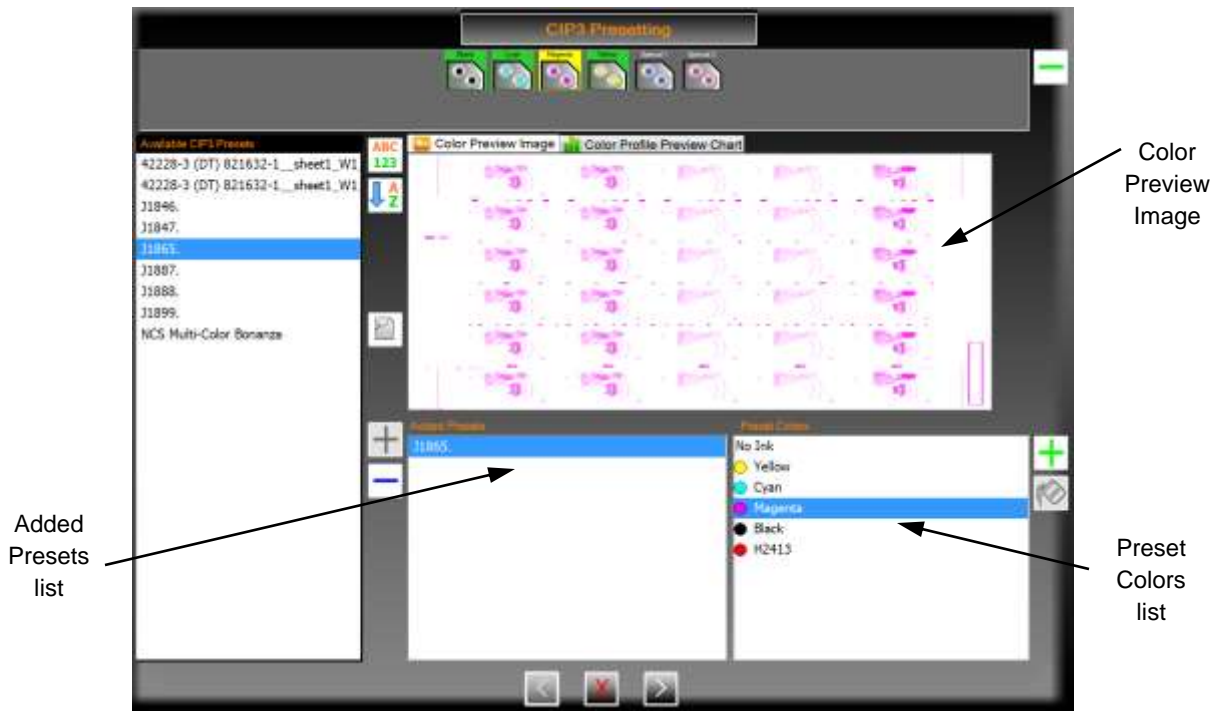
The **Available CIP3 Presets** list shows the preset data that can be selected to setup the CIP3 configuration. The Add button (blue + sign) becomes enabled when you click on a file in the Available CIP3 Presets list. Clicking on the **Add** button adds the file to the Added Presets list.

The next page of the CIP3 Presetting wizard displays after clicking the Add button, for you to choose the press surface for the preset settings.



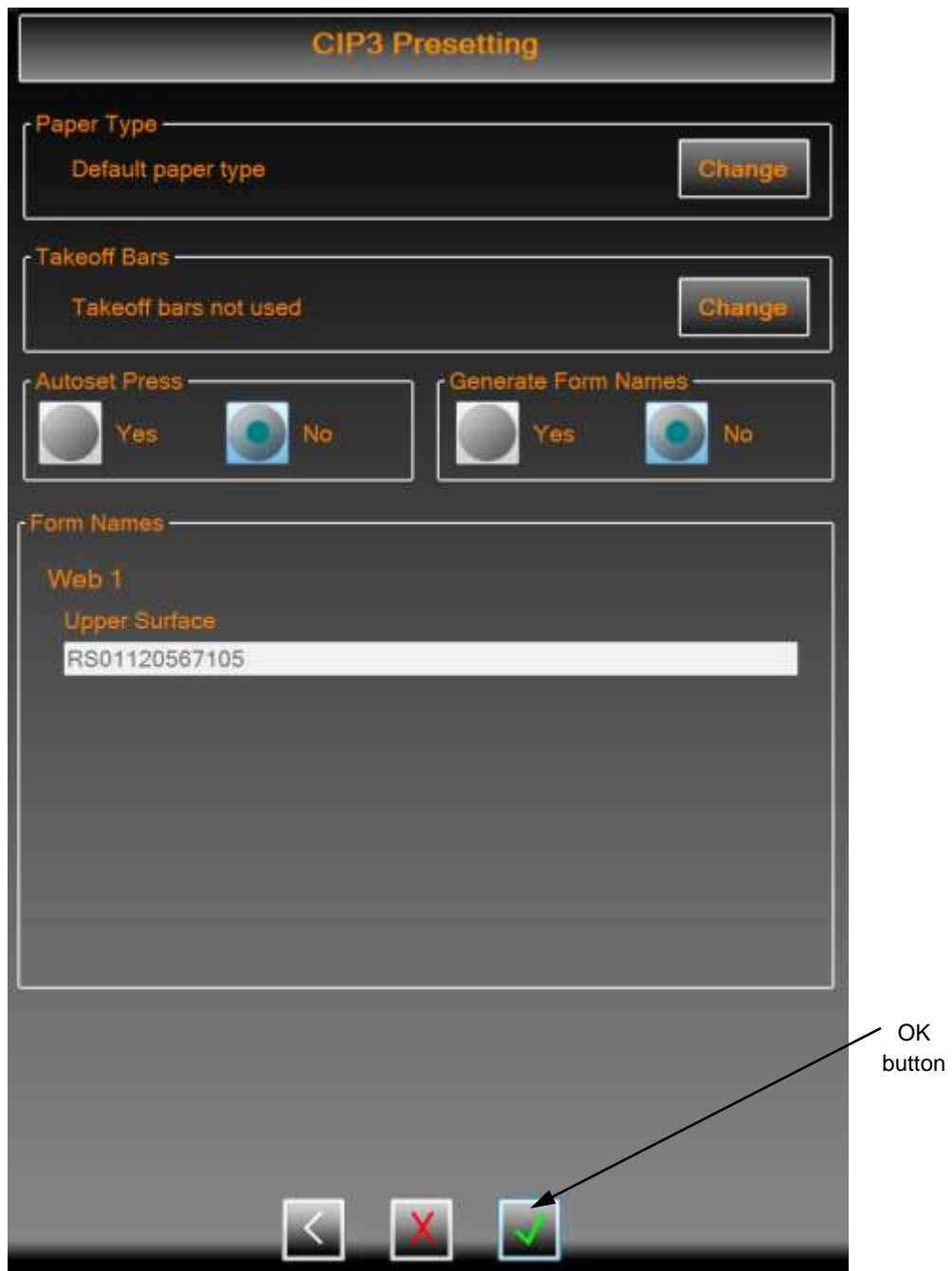
See [Matching Preset Data to Inkers](#) for more detailed information.

The next page of the CIP3 Presetting wizard displays after you click the OK button and shows the selected file added to the **Added Presets** list. It also shows the **Preset Colors** list, **Color Preview Image**, and **Color Profile Preview Chart** for the file.



Note: You can scroll all lists on the dialog by dragging inside the list, rather than clicking on a scroll bar.

The final page of the CIP3 Presetting wizard displays after clicking the Next button, for you to make any needed changes and then to click OK to assign the selected preset values to the press.

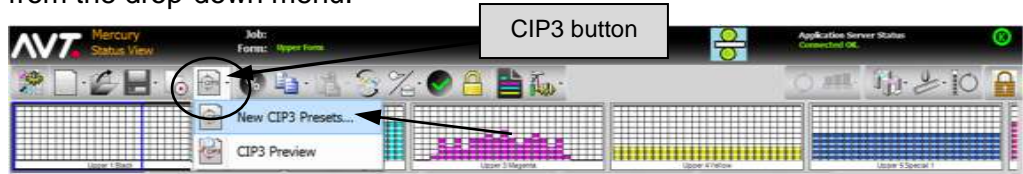


Important: When using the CIP3 Presets wizard, touch **Color OK** to save the best ink profiles of a form and adjust scan correction values for the selected paper type. See the *Mercury Advanced User's Manual* for more information.

See [Assigning & Applying the Presets](#) to use the CIP3 wizard to assign and apply preset values for the inkers on your press.

3.4.2 Assigning & Applying the Presets

- 1 Touch the **CIP3** button on the main toolbar and then touch **New CIP3 Presets** from the drop-down menu.



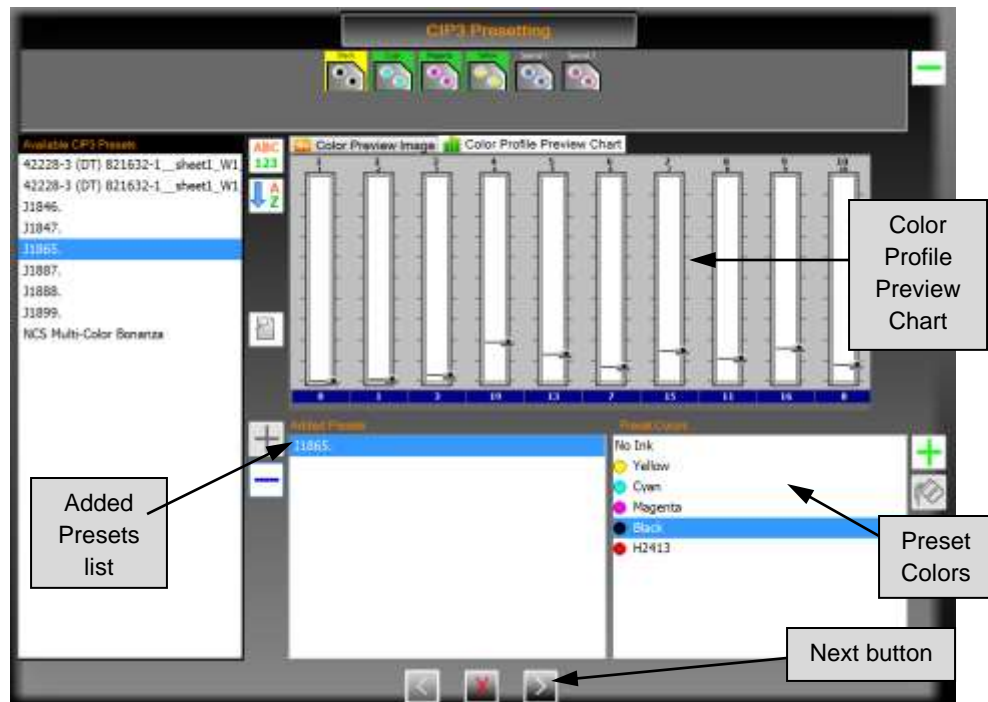
The first page of the CIP3 wizard displays.



- 2 Select a **file** from the **Available CIP3 Presets** list and click on the **Add** button to add the file to the **Added Presets** list.



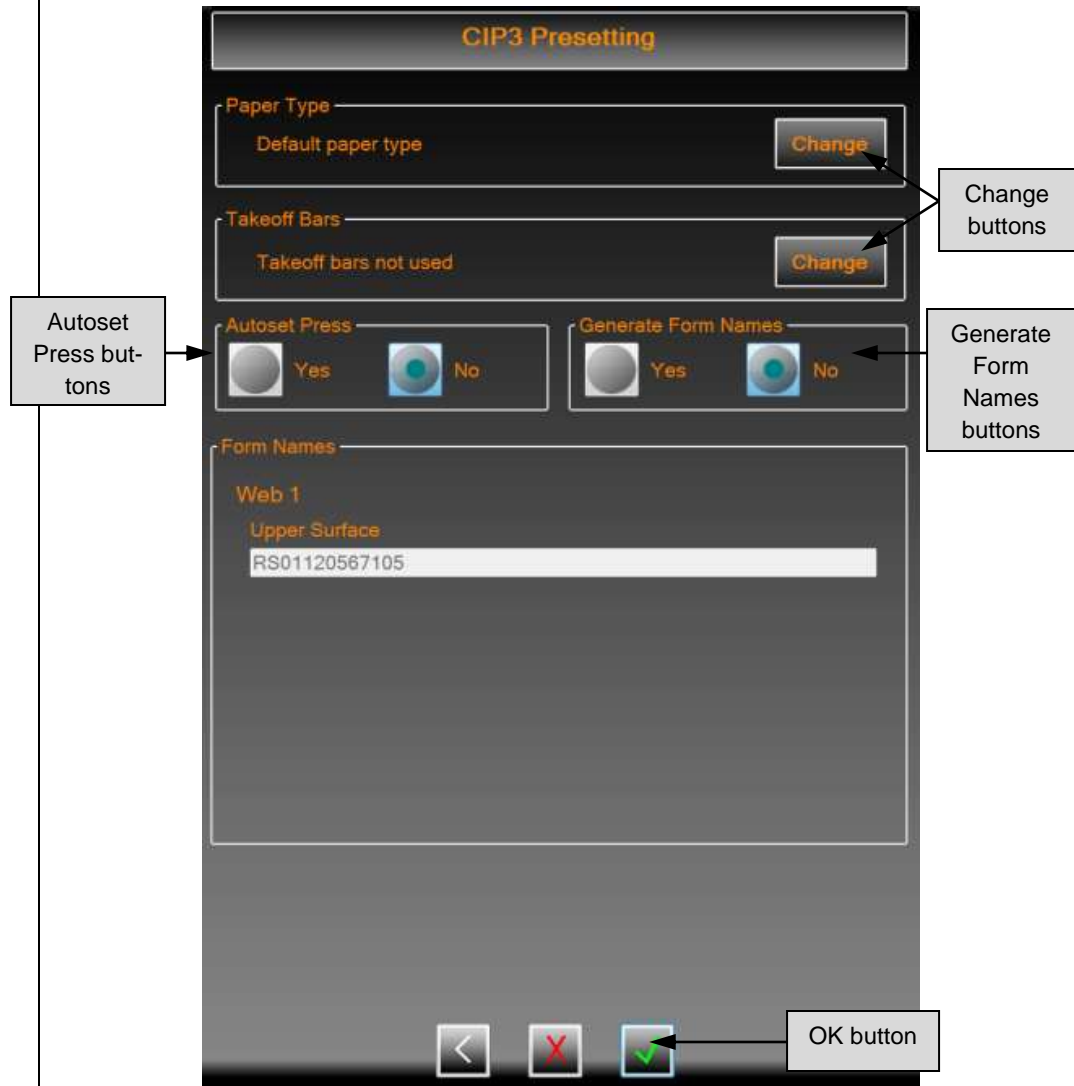
- 3 Click on the **Assign To Upper Surface** radio button and then click the **OK** button. The next page shows the file added to the **Added Presets** list.



- 4 Review the **Preset Colors** and **Color Profile Preview Chart**.

- 5 Click on **Color Preview Image** to review the print image.

6 Click the **Next** button to access the final page of the CIP3 Presetting wizard.



7 (Optional) Click on the **Change** buttons to make changes to **Paper Type** or **Takeoff Bars**, and click on the **Autoset Press** and **Generate Form Names** radio buttons (Yes / No) to turn them on or off.

See [Setting Additional CIP3 Preset Values](#) for more information.

8 Click the **OK** button to assign the preset values to the press.
Continue with [Reviewing the Assigned Presets](#).

3.4.3 Reviewing the Assigned Presets

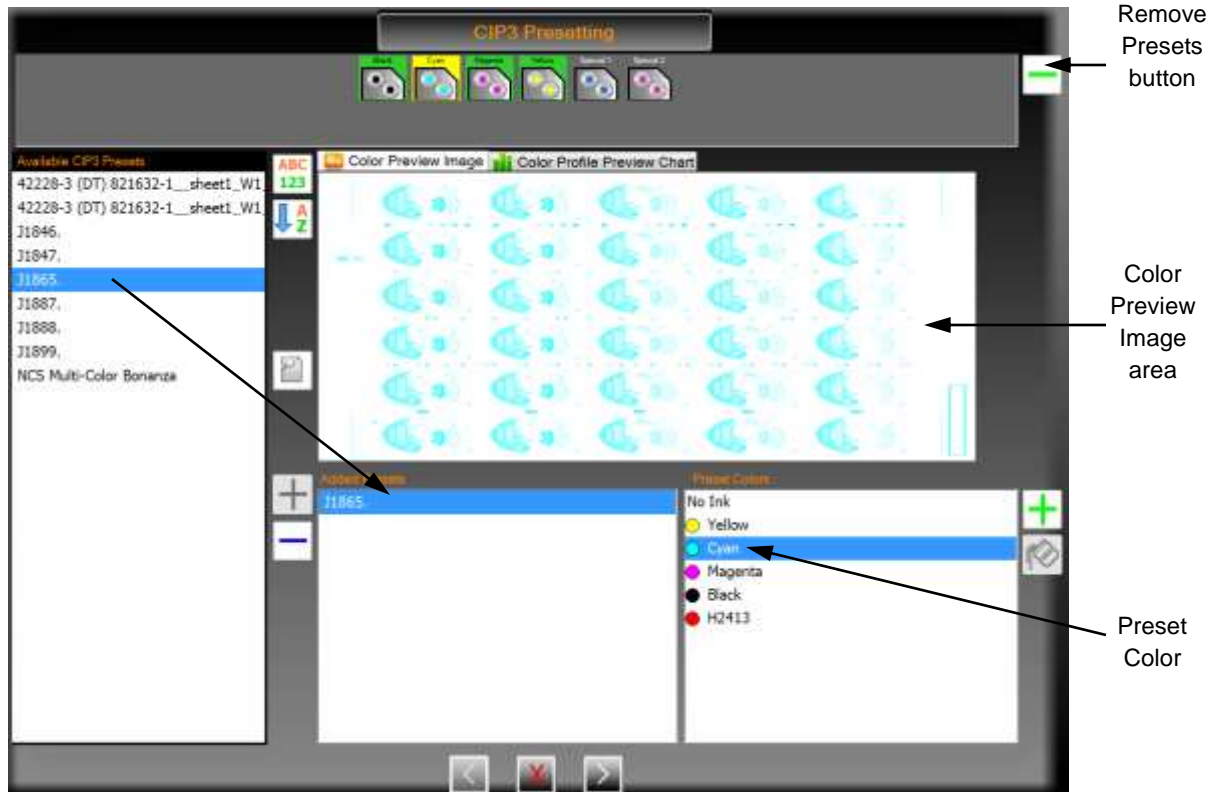
After assigning the selected preset values to the upper surface, the CIP3 Presetting dialog displays as follows.



- At the top, **inkers outlined in green** have had preset data applied either by the wizard or by the user.
- When a file is selected in the Added Presets list, **Preset Colors** is filled with all the colors in the Preset Data File. If the file contains data for both surfaces, the data is grouped by surface (Upper or Lower).
- Selecting an ink causes the **Assign Color** button (green plus) to become enabled. Clicking this places the wizard page in assign color mode. If the next control clicked on is an **inker in the press display area**, the color and file preset data will be assigned to that ink. If any other list is clicked on, including the Preset Color list, the assign color mode will be cancelled.
- Clicking on an ink while in assign color mode will cause the color and preset data to be assigned to that ink. If another ink exists on the same surface with the color being assigned, first the color and any existing preset data is swapped between the two inkers.

Example – CIP3 Preset Selecting Inker in Color Mode

If you were to try to assign cyan to the inker containing black, the data would be swapped between black and cyan and then the new data would be assigned to the inker. Doing this to the dialog above would display the dialog with the selected inker outlined in yellow.



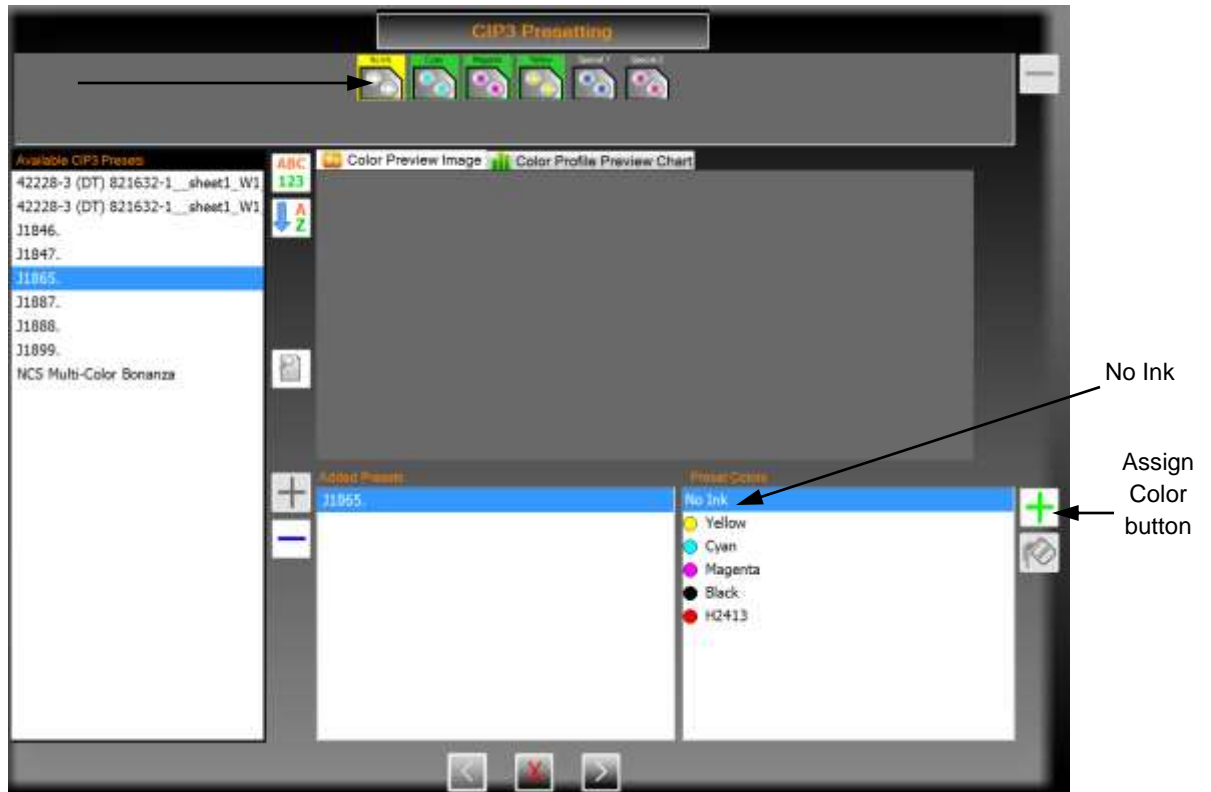
An inker can be selected when it has preset data assigned. When selected:

- The previously set **Added Presets** list selection changes to the file from which the preset data came.
- The **Preset Color** assigned to the inker is selected
- The preset image, if available, is displayed in the **Color Preview Image** area.
- The **Remove Presets** button (green minus, at the top) can be used to clear any preset assignments to an inker.

Example – CIP3 Preset Assigning No Ink in Preset Colors

A “no ink” value can be assigned to an inker by selecting the **No Ink** value in the Preset Colors, clicking the **Assign Color** button, and then clicking on the **inker** to clear the color. If any preset data has been assigned, it will be cleared as well.






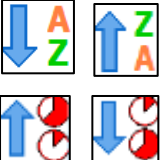



The following dialog shows the results when using assigning No Ink to the inker outlined in yellow.



The remaining buttons allow for manipulation of the Available CIP3 Presets list.

Buttons on the CIP3 Presetting Dialog

Following are some buttons you can use on the CIP3 Presetting dialog.

	<p>Presets Assigned</p>	<ul style="list-style-type: none"> • Inkers outlined in green show they have had preset data applied, either by the wizard or user. • Inker outlined in yellow has been selected.
	<p>Remove Preset File</p>	<p>Removes the preset file from the Added Presets list and removes any assignments associated with this file.</p>
	<p>Assign Color</p>	<p>Places wizard page in “assign color” mode.</p>
	<p>Remove Presets</p>	<p>Clears any preset assignments to an inker (at top, right).</p>
	<p>Sort by ABC 123 / Sort by Time</p>	<p>Toggles list to sort by alphanumeric or sort by time.</p>
	<p>Sort</p>	<p>Toggles to sort list in ascending or descending order.</p>
	<p>Filter</p>	<p>Allows user to type in a string to search on.</p>
	<p>Keyboard</p>	<p>Displays to allow filtering. Keyboard displays to enter a search string.</p>
	<p>Modify Color</p>	<p>Allows user to edit a color. Brings up color modification dialog.</p>

Filter Presets List

Pressing the **Filter** button causes a keyboard button and keyboard to display for you to enter a search string.



- When the **keyboard button** is visible, filtering is enabled.
- Typing a **search string** into the keyboard, filters the Available CIP3 Presets list to show all files that contain the search string. The search is case sensitive.
- You can close the keyboard at any time.
- Filtering is enabled until you touch the Filter button again; when this occurs, the list goes back to the original contents.

Modify Color in Preset File

When a color in a preset file is added that is not part of the ink library, it is assigned a default display color. You can use Modify Color to edit the color.



Pressing the **Modify Color** button brings up the **Select Color** dialog where you can change the display color to a more meaningful value.

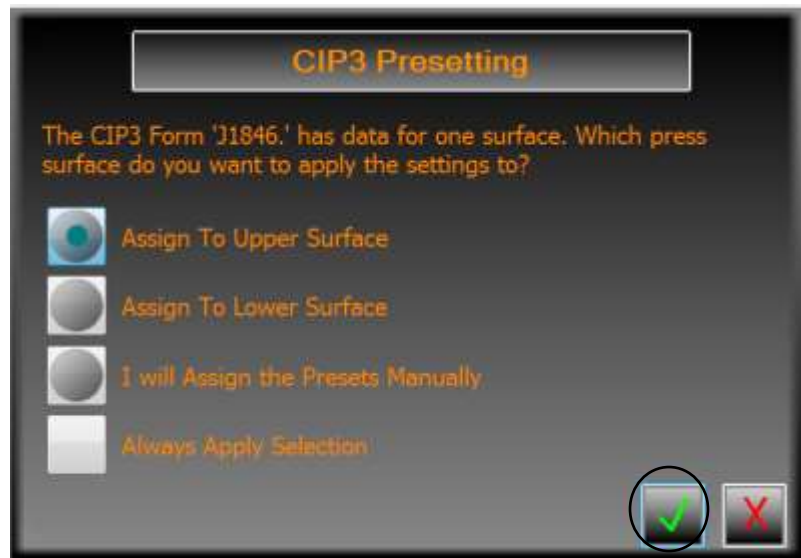


3.4.4 Matching Preset Data to Inkers

The preset data gets matched to inkers depending on the file selected and is added to the Added Preset list. The following table lists the match options.

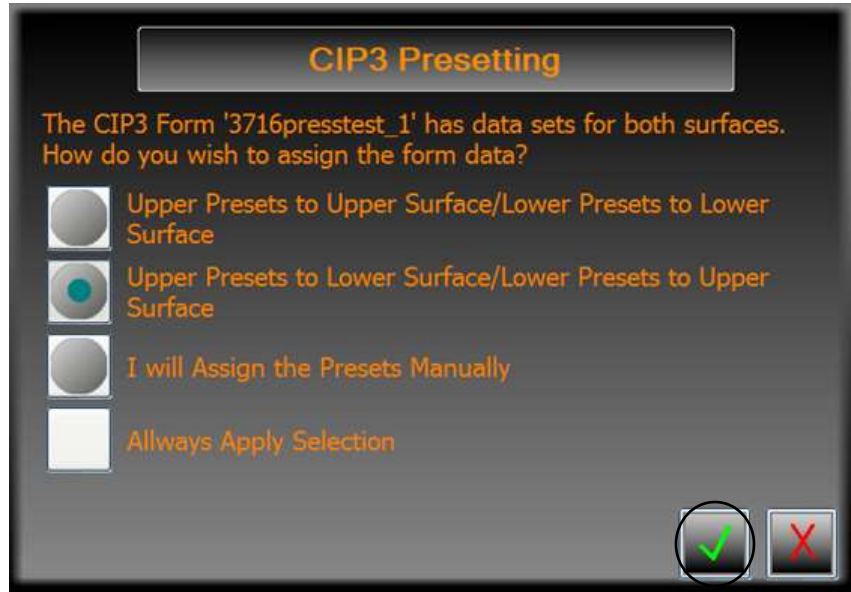
Press Type	Single-Sided CIP3 Data	Two-Sided CIP3 Data
Single Web	Choose the press side to match	Upper to Upper, Lower to Lower
Unitized Press w/o Turnbar	Match data to inkers	Choose the preset side to match
Unitized Press with Turnbar	Choose the press side to match	Upper to Upper, Lower to Lower

The following dialog displays when the press type is a single web and you choose a file with data for a single surface.



Assign to Upper Surface	Causes the CIP3 wizard to assign preset data from this file to any inkers on the upper surface, that have not been previously assigned preset data during this run of the wizard.
Assign to Lower Surface	Causes the CIP3 wizard to assign preset data from this file to any inkers on the lower surface, that have not been previously assigned preset data during this run of the wizard.
I will Assign the Presets Manually	Causes the CIP wizard to not do any assignments itself, allowing the user to assign values.
Always Apply Selection	Uses the value chosen by the user in all subsequent preset assignments.

The following dialog displays when the press type is a single web with two sides and the file contains two sets of preset data.



<p>Upper Presets to Upper Surface / Lower Presets to Lower Surface</p>	<p>Causes the CIP3 wizard to assign:</p> <ul style="list-style-type: none"> • Upper preset data from this file to any inkers on the upper surface • Lower preset data from this file to any inkers on the lower surface
<p>Upper Presets to Lower Surface / Lower Presets to Upper Surface</p>	<p>Causes the CIP3 wizard to assign:</p> <ul style="list-style-type: none"> • Upper preset data from this file to any inkers on the lower surface • Lower preset data from this file to any inkers on the upper surface
<p>I will Assign the Presets Manually</p>	<p>Causes the CIP wizard to not do any assignments itself, allowing the user to assign values.</p>
<p>Always Apply Selection</p>	<p>Uses the value chosen by the user in all subsequent preset assignments.</p>

After making a selection on how to assign presets, click the **OK** button to assign the values. These values can be reconfigured or reset on the Runtime Options dialog.

See the *Mercury Advanced User's Manual* for more detailed information on configuring the CIP3 Presetting options.

3.4.5 Setting Additional CIP3 Preset Values

Once the final CIP3 data has been assigned, touching the **Next** button brings up the final wizard page.



1	Click on the Yes radio button to select Autoset Press . The keys on the press will be changed to the preset values. All inkers that have not had preset data assigned will have their keys set to zero.
2	Click on the Yes radio button to Generate Form Names. If no form is present, CIP3 Preset allows a new form to be created with form name of Preset Data.


3 Click on the **Change** button to change the **Paper Type**.



4 Click on the **Change** button to change the **Takeoff Bars** option.



5 Click the **OK** button to assign the preset values.

6 Click  to create the CIP3 form.

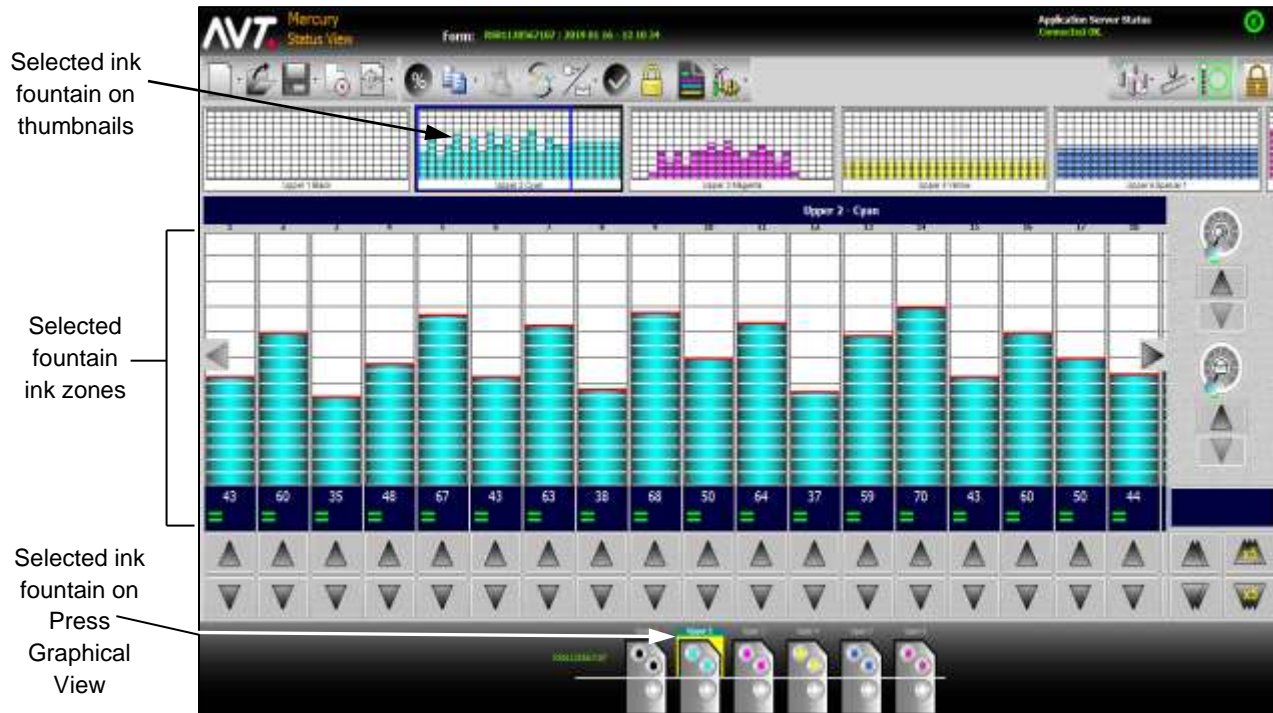
4 Making Ink Fountain Adjustments

This section describes how to use the Mercury system to make ink fountain adjustments.

4.1 Adjust Ink Zone Settings

On the Mercury Status View, the ink fountains display as thumbnails under the main toolbar and in the Press Graphical View at the bottom of the view.

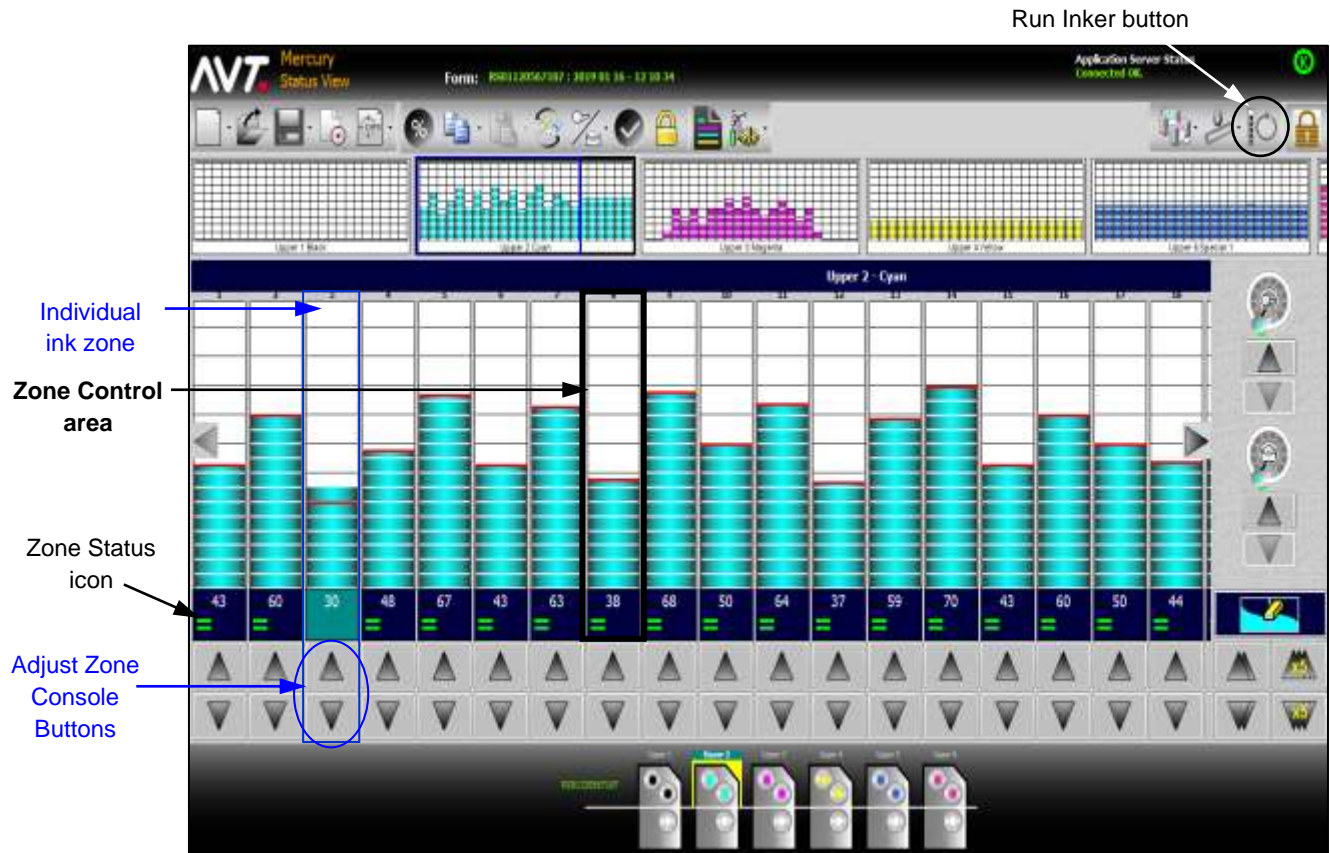
To select an **ink fountain**, touch it on the thumbnails or on the Press Graphical View.



The selected ink fountain is highlighted on the thumbnails and on the Press Graphical View.

4.1.1 Adjusting One Ink Zone

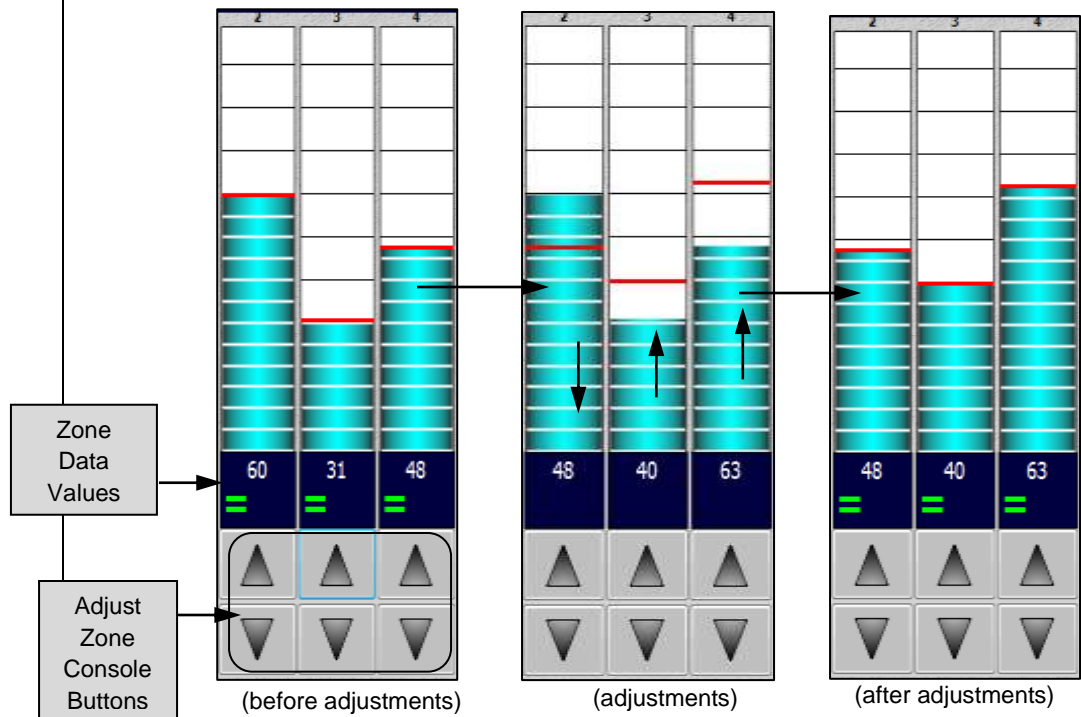
On the Mercury Status View, you can adjust individual ink zone settings using the Adjust Zone console buttons.



- 1 Touch the **Adjust Zone** console button.
The two-digit zone data value changes as you make the adjustments.
The Zone Status icon goes away after a change is made, indicating a change is pending. When the ink zone is in position, the zone status icon shows an equal sign (=).
Note: If the “tap to adjust zone console values” feature is enabled, you can **tap in a Zone Control area** to adjust the zone position. The position or value of the zone slider should rise or fall accordingly. See the *Mercury Advanced User’s Manual* for more detailed information.

2 Touch the **Run Inker** button.

After setting the ink zone adjustments, the ink zones will show the adjusted values.

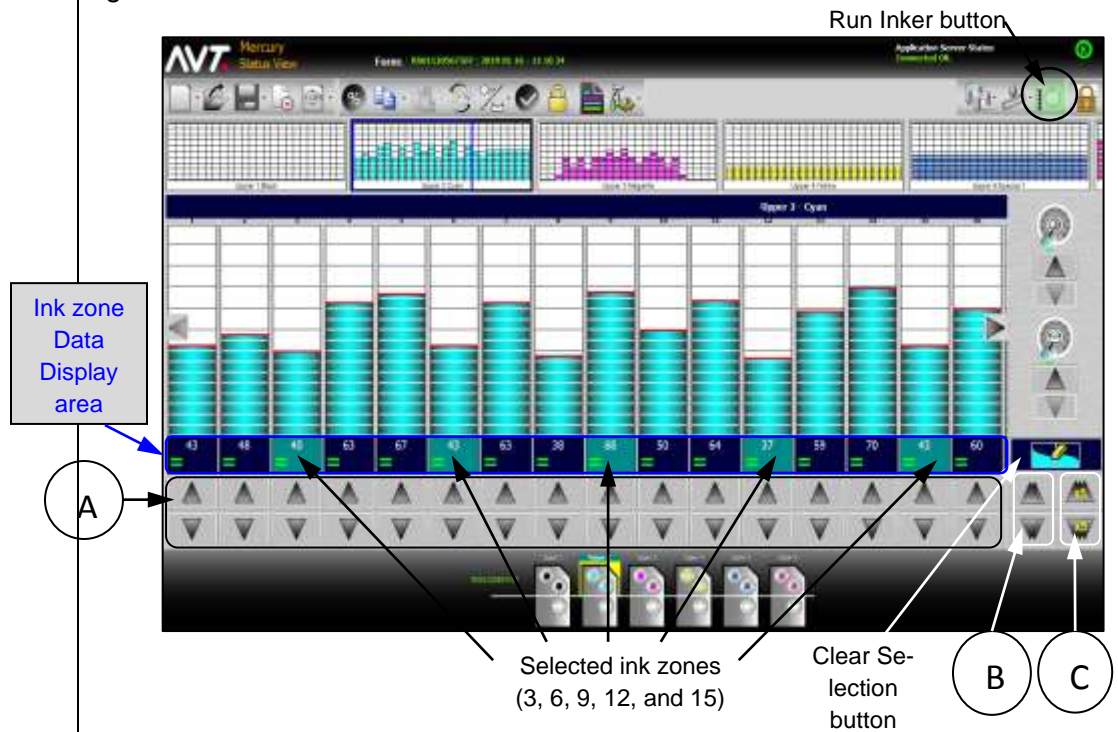


4.1.2 Adjusting Selected Ink Zones

On the Mercury Status View, you can select one or more ink zones and then use several methods to adjust the ink zone settings.

Method	Description
A	Adjust one or more selected ink zones using the Adjust Zone console buttons.
B	Adjust selected ink zones or all ink zones using the Adjust All Zone console buttons.
C	Adjust selected ink zones or all ink zones using the Adjust All Zone X5 console buttons.

- 1 Touch the **Ink Zone Data Display** area for one or more ink zones. You will see the ink zone data display area of the ink zones change from dark blue to light blue.

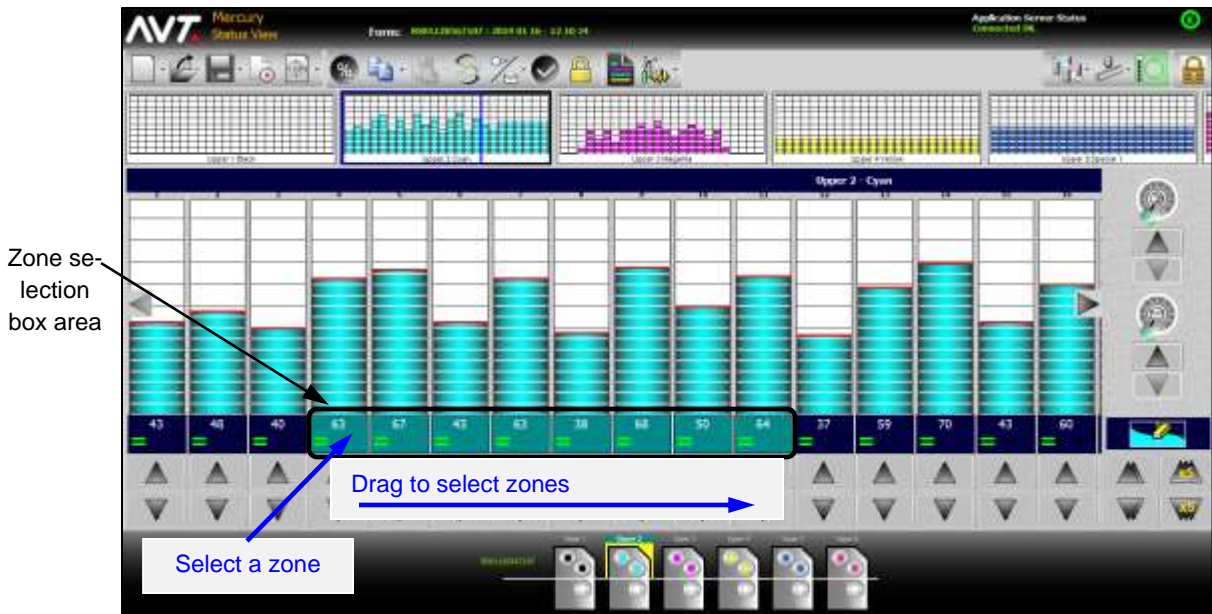


- 2 Adjust the selected ink zones using one of the three methods (A, B, or C) shown in the figure.
 - To deselect an ink zone, touch the **selected ink zone** again.
 - To deselect all selected ink zones, touch the **Clear Selection** button.

- 3 After making the adjustments, touch the **Run Inker** button.

Drag and Select Multiple Ink Zones

Select multiple zones by selecting and dragging on the zone selection box area.

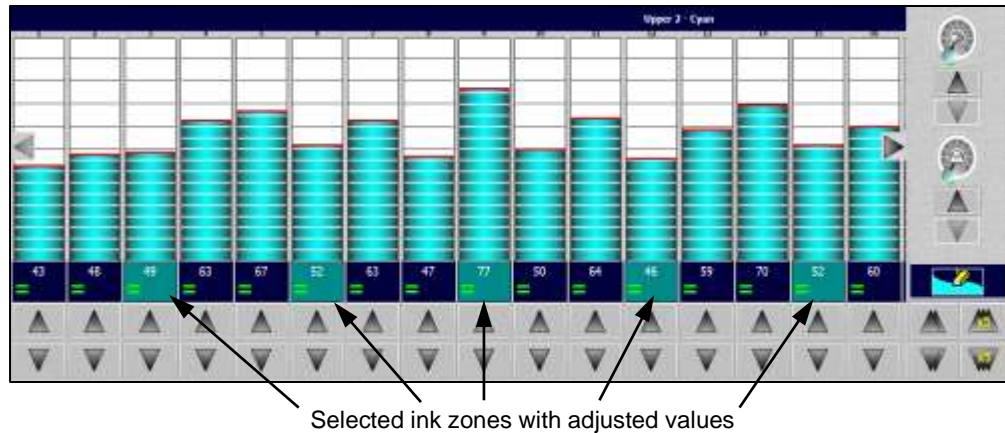


You can select multiple zones by moving horizontally, left-to-right or right-to-left.

Adjust Selected Ink Zones Using Adjust Zone Console Buttons

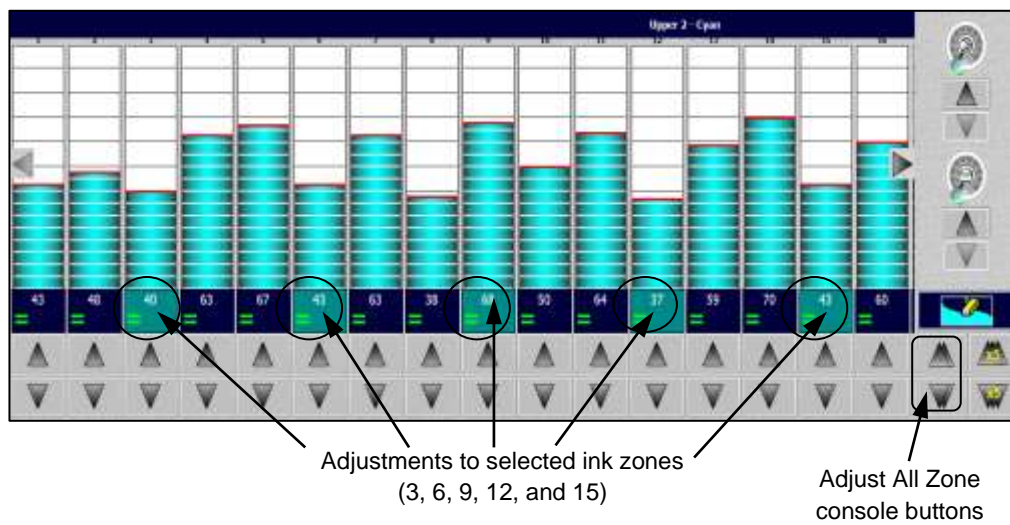
<p>1</p>	<p>Select one or more ink zones, by touching the Ink Zone Data Display area for each ink zone.</p> <p>The screenshot shows the AV7 Mercury Status View interface with five zones circled in blue: 40, 41, 68, 37, and 43. Arrows point from these circles to the text 'Adjustments to selected ink zones (3, 6, 9, 12, and 15)'. Another arrow points from the 'Adjust Zone' console buttons (up and down arrows) to the text 'Adjust Zone console buttons'.</p>
<p>2</p>	<p>To adjust all of the selected ink zones at the same time, touch one of the Adjust Zone console buttons.</p>

3 Touch the **Run Inker** button.



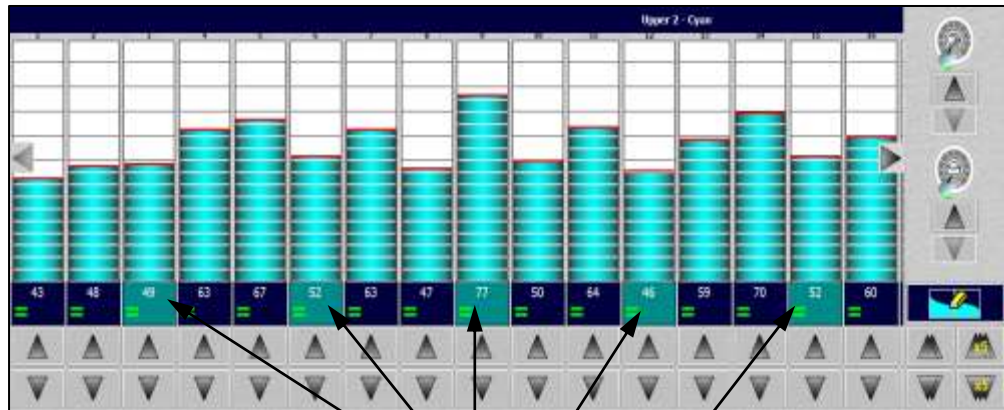
Adjust Selected Ink Zones Using Adjust All Zone Console Buttons

1 Select one or more ink zones, by touching the **Ink Zone Data Display** area for each ink zone.



2 To adjust all of the selected ink zones at the same time, touch either of the **Adjust All Zone** console buttons.

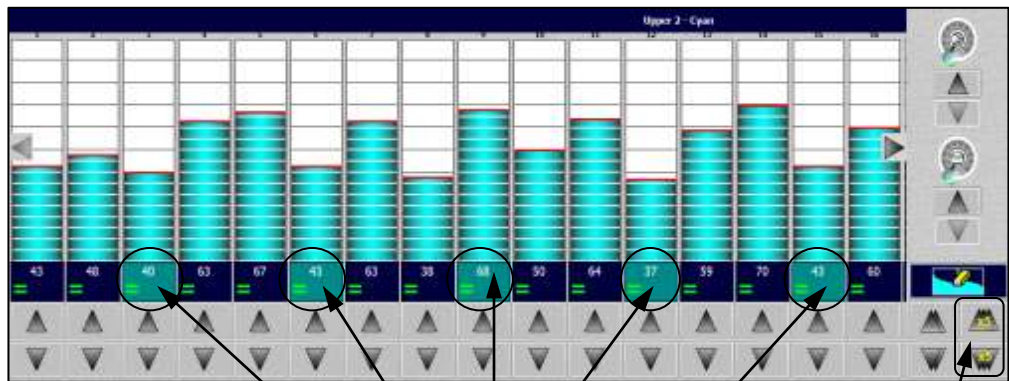
- 3 Touch the **Run Inker** button.



Selected ink zones with adjusted values

Adjust Selected Ink Zones Using Adjust All Zone X5 Console Buttons

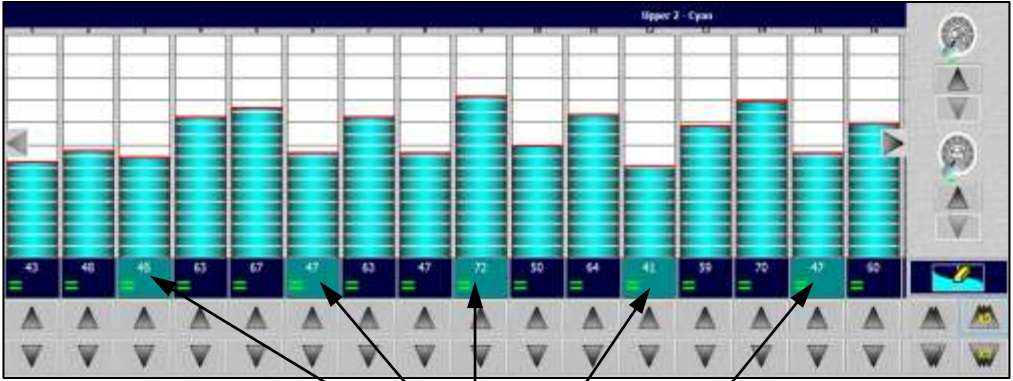
- 1 Select one or more ink zones, by touching the **Ink Zone Data Display** area for each ink zone.





Adjustments to selected ink zones
(3, 6, 9, 12, and 15)

Adjust All Zone X5
console buttons

- 2 To adjust all of the selected ink zones by 5% at the same time, touch either of the **Adjust All Zone X5** console buttons.

3	Touch the Run Inker button.
 <p style="text-align: center;">Selected ink zones with values adjusted by 5%</p>	

4.1.3 Adjusting All Zones

1	Touch either of the Adjust All Zone  or Adjust All Zone 5%  console buttons to adjust all of the ink zones on the Status View at the same time.
2	Touch the Run Inker button.

Note: If no ink zones are selected, the **Adjust All Zone or Adjust All Zone 5%** console buttons will adjust all ink zones. If one or more ink zones are selected, the ink zone data display area changes from dark blue to light blue and the **Adjust All Zone or Adjust All Zone 5%** console buttons will be applied to the selected ink zones only.


4.1.4 Adjusting Ink Zone Settings Using % Inc/Dec

On the % Inc/Dec View, you can use a % change value (percentage of inclination or declination value) to adjust one or more selected ink zones or all ink zones.

- 1 Select one or more ink zones by touching the **Ink Zone Data Display** area for each zone.

Selected ink zones
(3, 6, 9, 12, and 15)

Note: If you want to adjust all ink zones, do not select any ink zones and go to step 2.

- 2 Touch  (% Inc/Dec button).

Enter Percentage Value

Input Range: -100 to 141

% Value

Apply To:


Current Inker

Current Form

The Enter Percentage Value popup displays for you to specify the value.

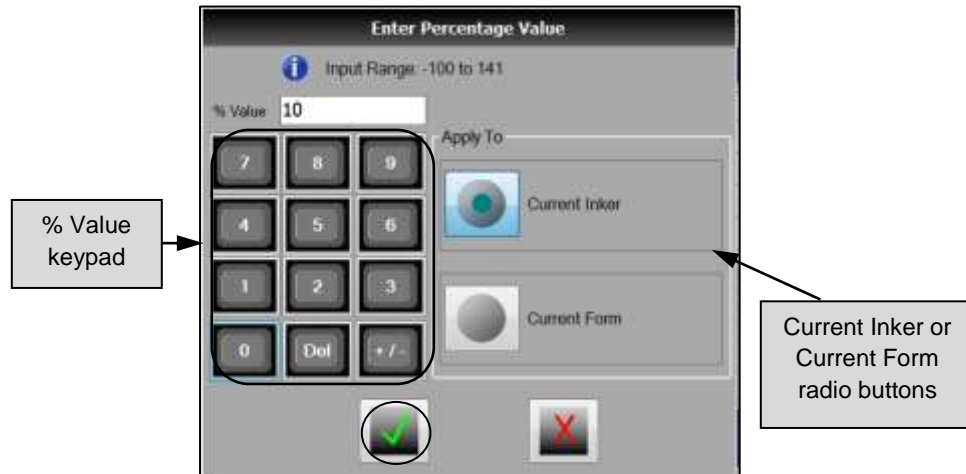
3

- A. Use the **% Value keypad** to enter the desired value. The valid input range displays above the % Value field.

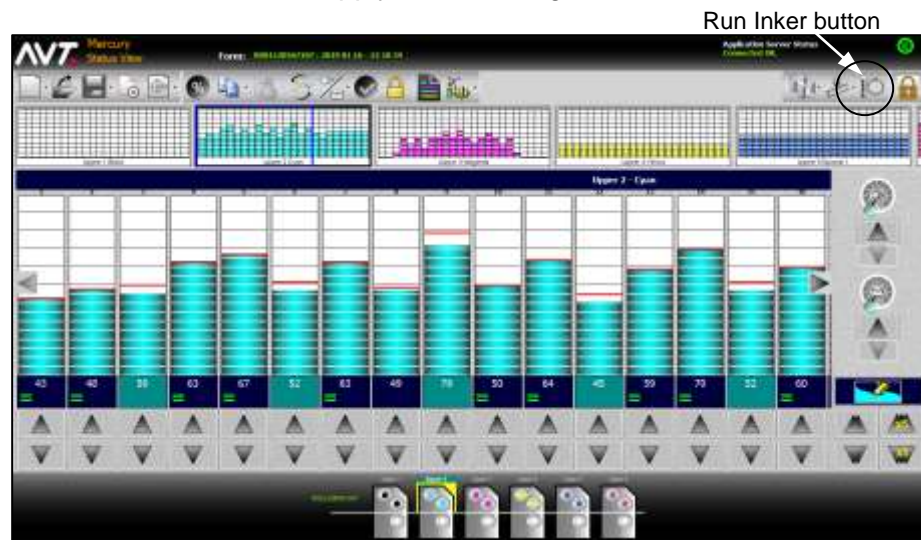
By default, this will be a positive value. Select  (+/- button) to toggle to a negative value. Toggle again to positive value.

- B. Touch either the **Current Inker** or **Current Form** radio button.

By default, the Current Inker is selected and the increase/decrease will apply to all inkers in the form.



- C. Touch the **OK** button to apply the % change value.



4

- Touch the **Run Inker** button.

Note: If no ink zones were selected on the Status View, the % Inc/Dec change value is applied to all ink zones. If one or more ink zones were selected, the ink zone data display area changes from dark blue to light blue and the **% Inc/Dec** change value will be applied to the selected ink zones only.

4.1.5 Adjusting Ink Zones Using Blade Smoothing

You can use blade smoothing to cause the zone positions of adjacent zones to correctly echo the physical changes seen in the fountain keys segments.

Fountain blades in AVT designed fountains do not have key segments which are totally isolated. Depending on the blade type used in your press, the effect of moving a single key will distribute more or less ink to adjacent key segments.

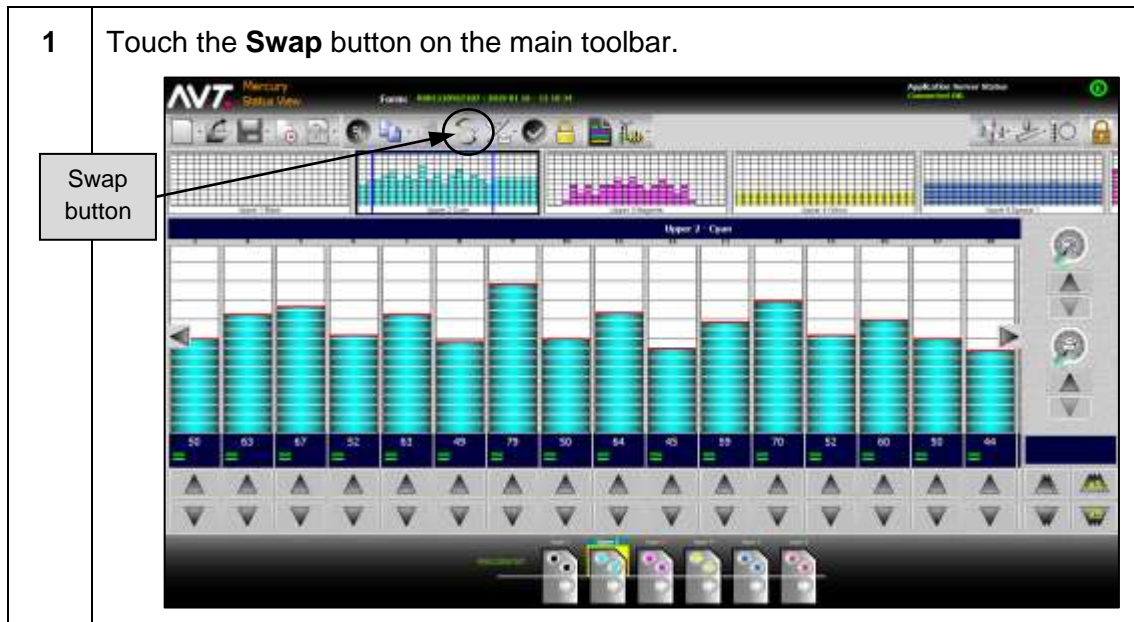
The blade smoothing tolerance options you can set are:

- 30% - Only 30% allowed between adjacent keys
- 50% - Only 50% allowed between adjacent keys
- 70% - Only 70% allowed between adjacent keys
- Disable Smoothing

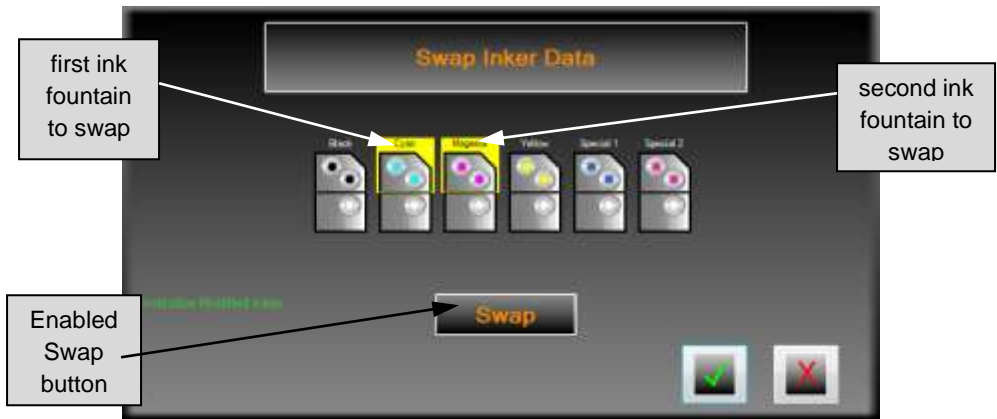
Note: Using blade smoothing is optional. See the *Mercury Advanced User's Manual* for more detailed information.

4.2 Swap Ink Zone Settings

You can swap ink zone settings between any two ink fountains.



2 Touch the **first ink fountain** and **second ink fountain** you want to swap.



After touching the second ink fountain, the Swap button is enabled.

3 Touch the **Swap** button and the Swap Inker Data dialog redisplay showing the swapped ink fountains.



4 Touch the **OK** button to save the settings.

The Status View redisplay showing the swapped ink fountains in both the thumbnails and Press Graphical View.



Note: Only zone and color data will be swapped. No on-press data can be swapped.

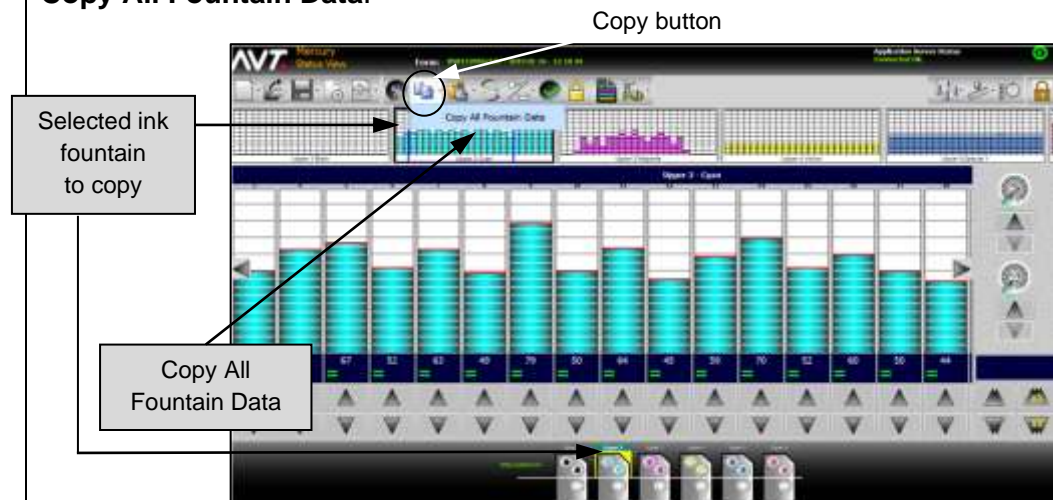
4.3 Copy Ink Zones

You can copy ink zones and use the Block Copy/Paste function to:

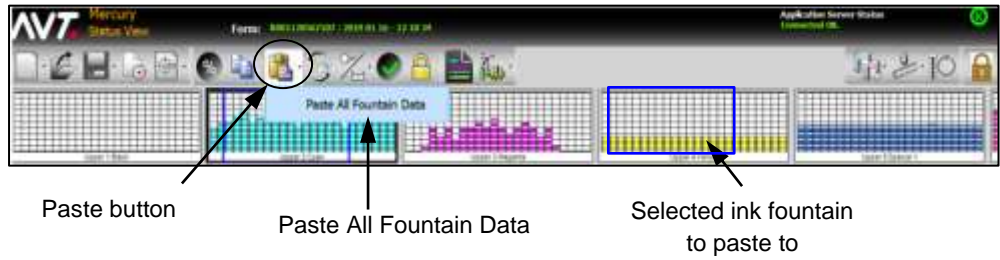
- copy all ink zones from one ink fountain to another ink fountain
- block copy selected ink zones
- block paste selected ink zones to other groups of ink zones within the same ink fountain or in other ink fountains

4.3.1 Copying All Ink Zones from One Ink Fountain to Another

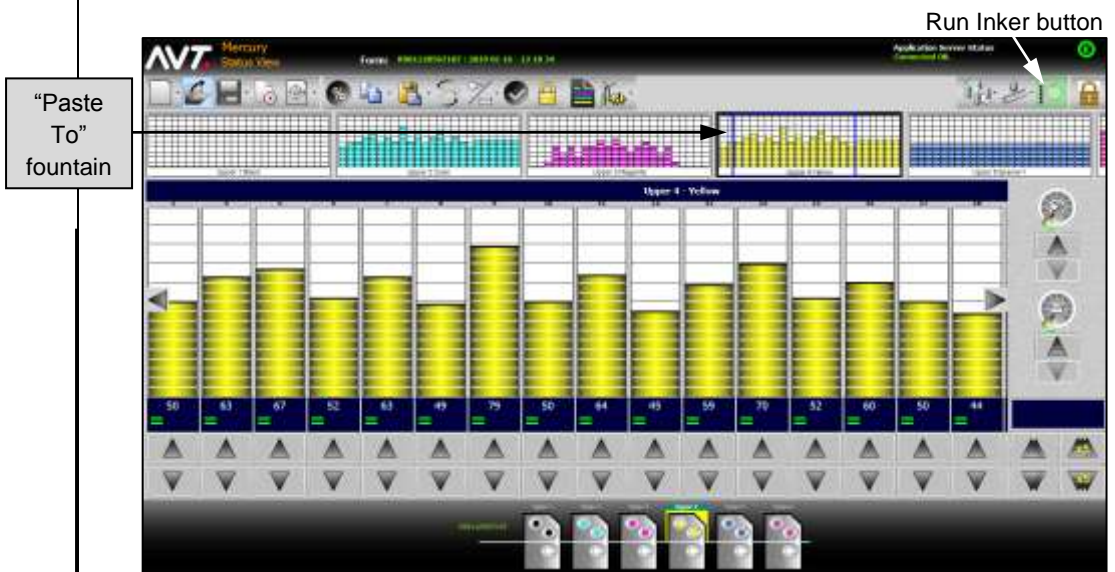
1 Touch the **fountain** you want to copy, touch the **Copy** button, and then touch **Copy All Fountain Data**.



- 2 Touch the **fountain** you want to paste to, touch the **Paste** button, and then touch **Paste All Fountain Data**.



- 3 Touch the **Run Inker** button to set the ink zone adjustments on the “paste to” fountain.

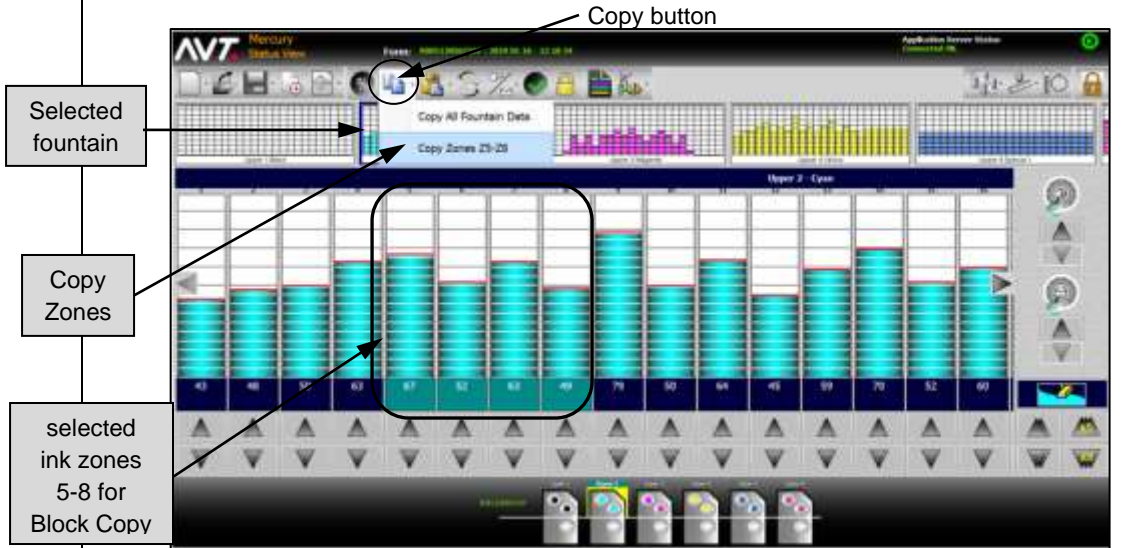


After you set the ink zone adjustments, all the ink zones for the “paste to” fountain will show the adjusted values.

4.3.2 Block Copying Selected Ink Zones

You can copy a block of selected ink zones from groups of ink zones within an ink fountain.

- 1 Touch the **fountain** you want to copy, touch one or more **ink zones** that you want to copy from the fountain, touch the **Copy** button, and then touch **Copy Zones**.


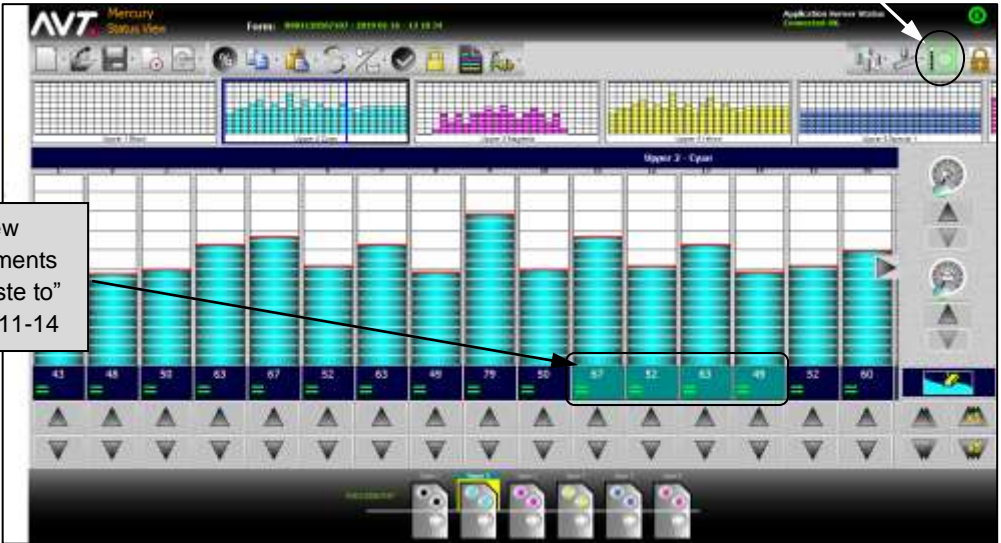


- 2 Continue with [Block Pasting Selected Ink Zones](#).

4.3.3 Block Pasting Selected Ink Zones

You can paste a block of selected ink zones to other groups of ink zones within the same ink fountain or to other groups of ink zones in other ink fountains.

Paste to Other Ink Zones in Same Ink Fountain

<p>1</p> <p>Paste button</p> <p>Paste to Zones</p> <p>First zone for paste (Zone 11)</p>	<p>After completing the Block Copy, touch the first ink zone where you want to paste the copy zones, touch the Paste button, and then touch Paste to Zones.</p> 
<p>2</p> <p>View adjustments for "paste to" zones 11-14</p>	<p>Touch the Run Inker button.</p>  <p>After you set the ink zone adjustments, all the "paste to" ink zones will show the adjusted values.</p>
<p>3</p>	<p>As needed, repeat steps 1-2 to paste the copy buffer to other groups of ink zones on the selected ink fountain.</p>

Paste to Other Ink Zones in Other Ink Fountains

1	<p>After completing the Block Copy, touch the fountain you want to paste to and then touch the first ink zone where you want to paste the copy buffer.</p>
<p>Paste button</p>	
2	<p>Touch the Paste button and then touch Paste to Zones.</p>
3	<p>Touch the Run Inker button.</p> <p>After you set the ink zone adjustments, the block of selected ink zones for the "paste to" fountain will show the adjusted values.</p>
4	<p>As needed, repeat steps 1-3 to paste the copy buffer to other groups of ink zones on the selected ink fountain or to other ink fountains.</p>

4.4 Adjust Ink Sweeps and Waters

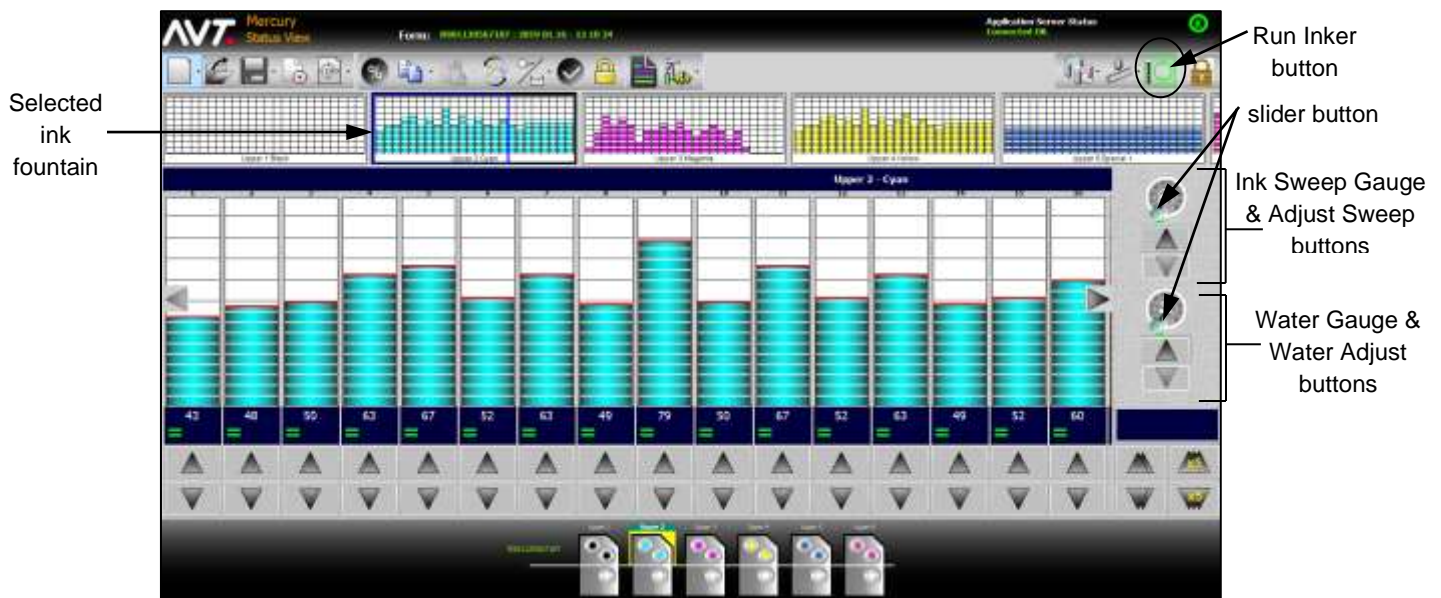
You can adjust the ink sweeps and waters for a selected ink fountain. You can also adjust one sweep, multiple sweeps, or all sweeps using Sweep All and one water, multiple waters, or all waters using Water All.

Notes:

- The Ink Sweep and Water Sweep gauges and buttons, and the Sweep All / Water All toolbar buttons are only enabled if your system configuration indicates they are enabled. Disabled gauges and buttons are grayed-out.
- If the “tap to adjust zone console values” feature is enabled, you can tap on a sweep or water control to adjust the zone position. See the *Mercury Advanced User’s Manual* for more detailed information.
- If your system was configured for sweep and water ramping, see the *Mercury Advanced User’s Manual* for information on using this optional feature.

4.4.1 Adjusting Inks or Waters for a Selected Fountain

You can adjust the inks and waters for a selected ink fountain using the Ink Sweep Gauge, Water Gauge, Adjust Sweep buttons, or Adjust Water buttons.

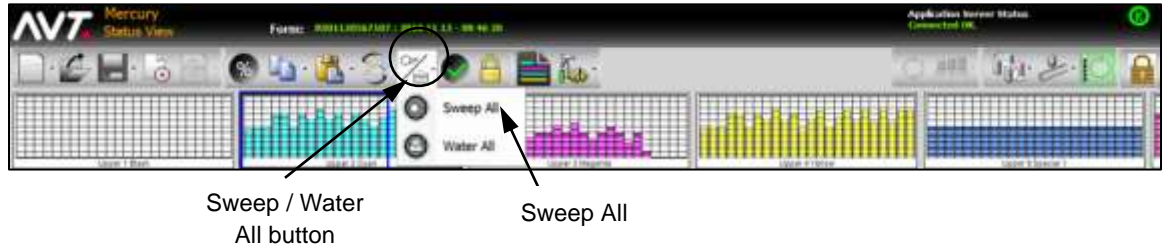


1	Touch and move the slider button on the Ink Sweep Gauge or Water Gauge, or touch either of the Adjust (Up or Down) buttons. While making the adjustment, you will see the slider button rotate around the gauge.
2	Touch the Run Inker button.

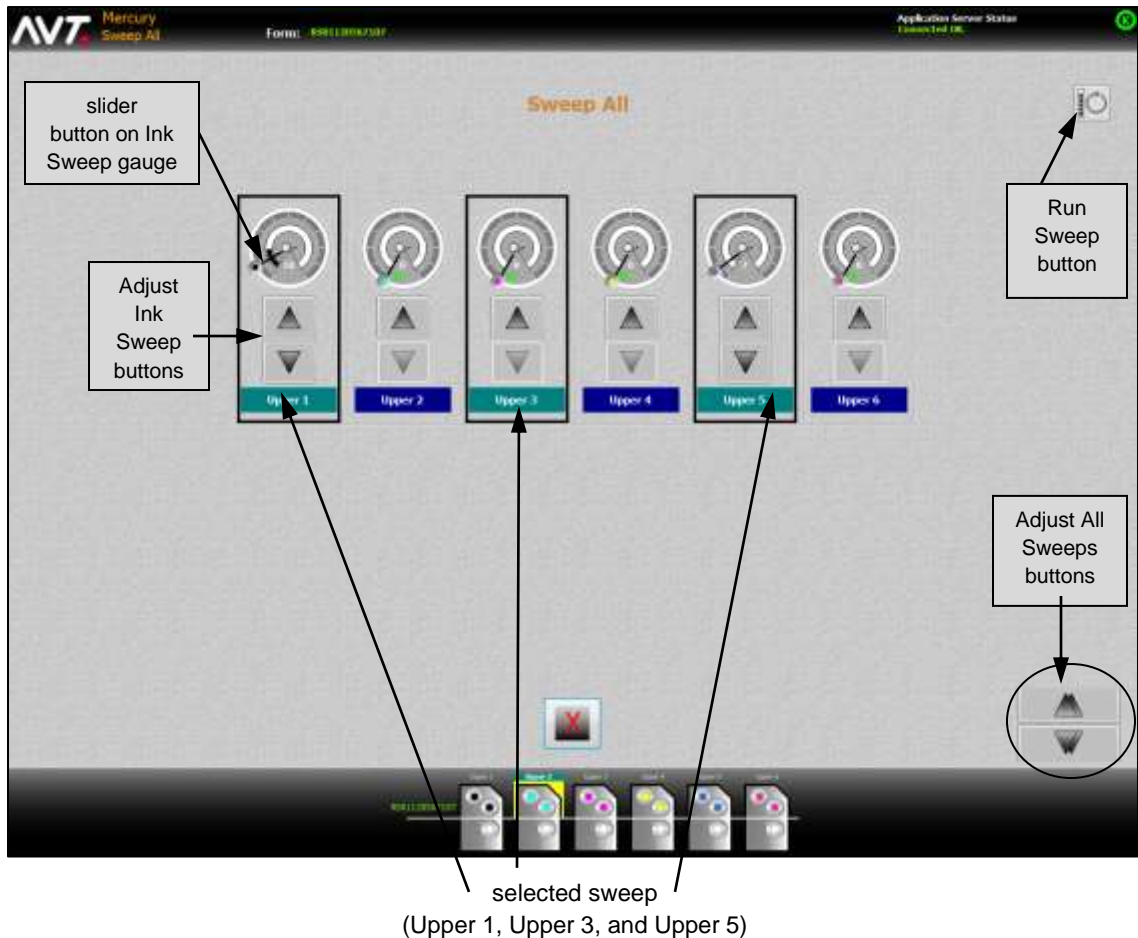
4.4.2 Adjusting One or More Ink Sweeps Using Sweep All

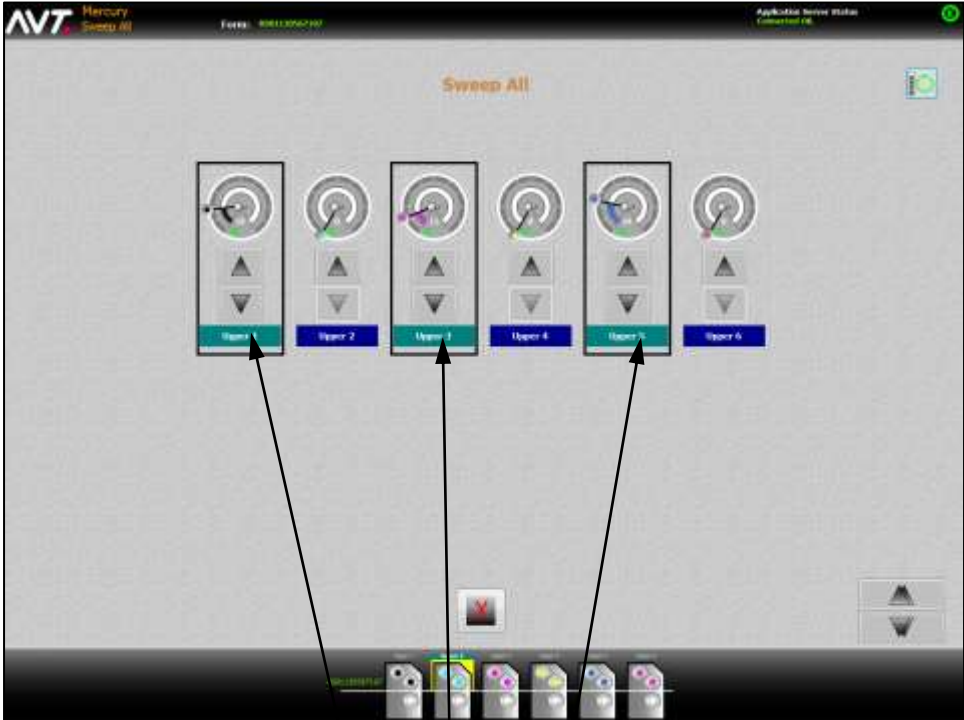
On the Sweep All screen, you can adjust one or more ink sweeps or all ink sweeps.

To access the Sweep All screen, touch the **Sweep / Water All** button and then touch **Sweep All**.



The Sweep All screen displays all the sweeps with an Ink Sweep Gauge, Adjust Ink Sweep buttons, and an ink fountain label.

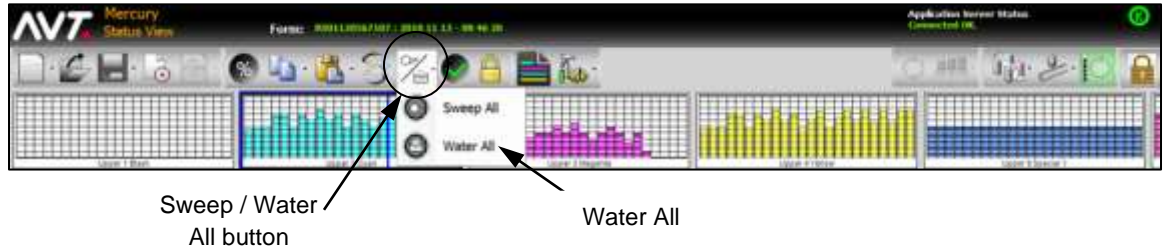


1	Touch one or more sweeps that you want to adjust.
2	<p>To adjust all of the selected sweeps at the same time, touch either of the Adjust All Sweeps buttons.</p> <p style="text-align: center;">OR</p> <p>To adjust all of the selected sweeps at the same time, touch and move the slider button on an Ink Sweep Gauge or the Adjust Ink Sweep Up or Down buttons for any one of the selected sweeps.</p> <p>Note: If no sweeps are selected on the Sweep All screen, the Adjust All Sweeps buttons are applied to all sweeps.</p>
3	<p>Touch the Run Sweep button.</p> <p>The selected sweeps display their new sweep settings.</p> <div style="text-align: center;">  <p>After adjust selected sweeps</p> </div>

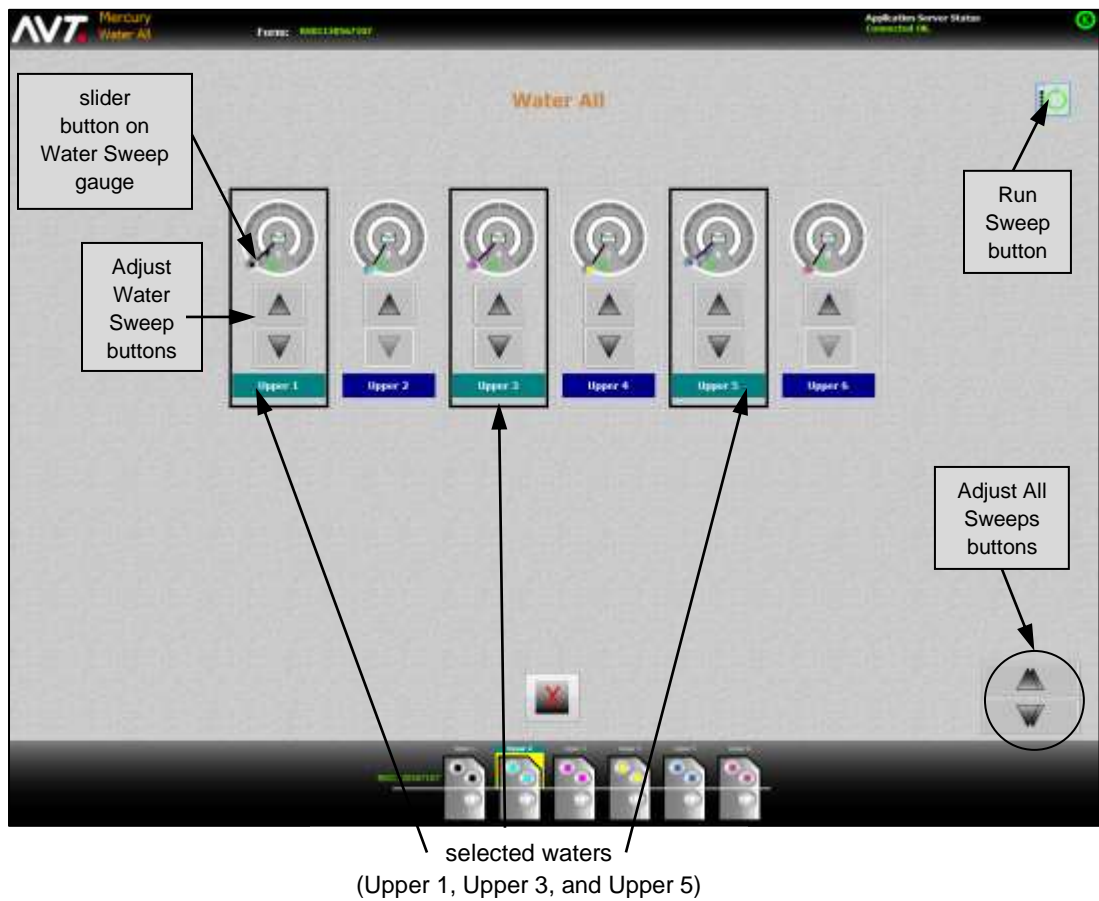
4.4.3 Adjusting One or More Water Waters Using Water All

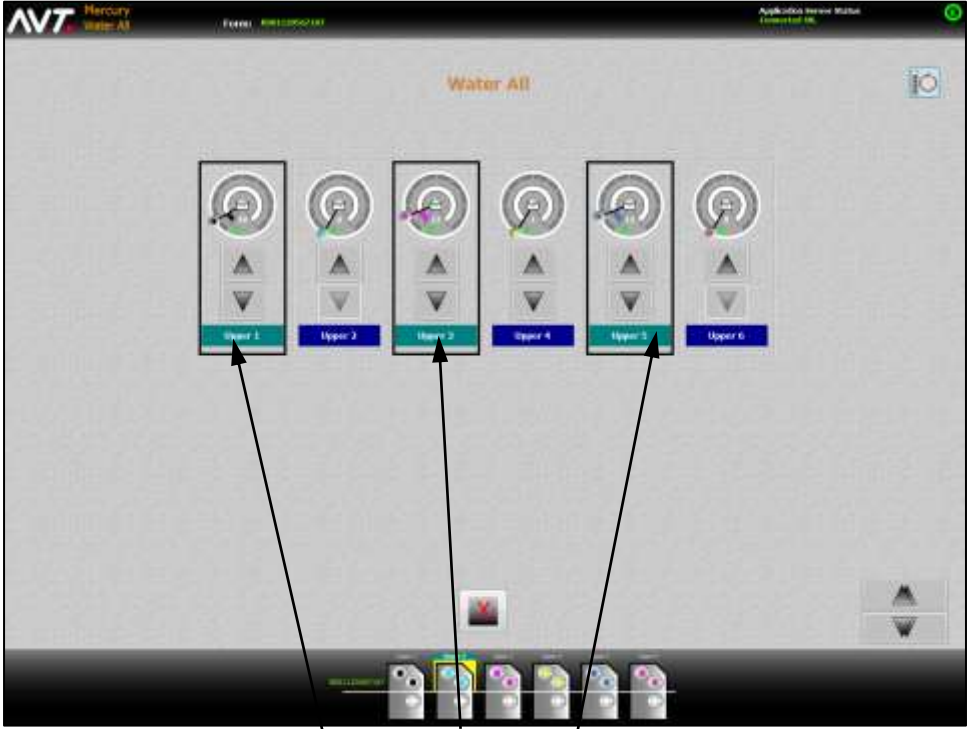
On the Water All screen, you can adjust one or more waters or all waters.

To access the Water All screen, touch the **Sweep / Water All** button and then touch **Water All**.



The Water All screen displays all of the water sweeps with a Water Sweep Gauge, Adjust Water Sweep buttons, and an ink fountain label.



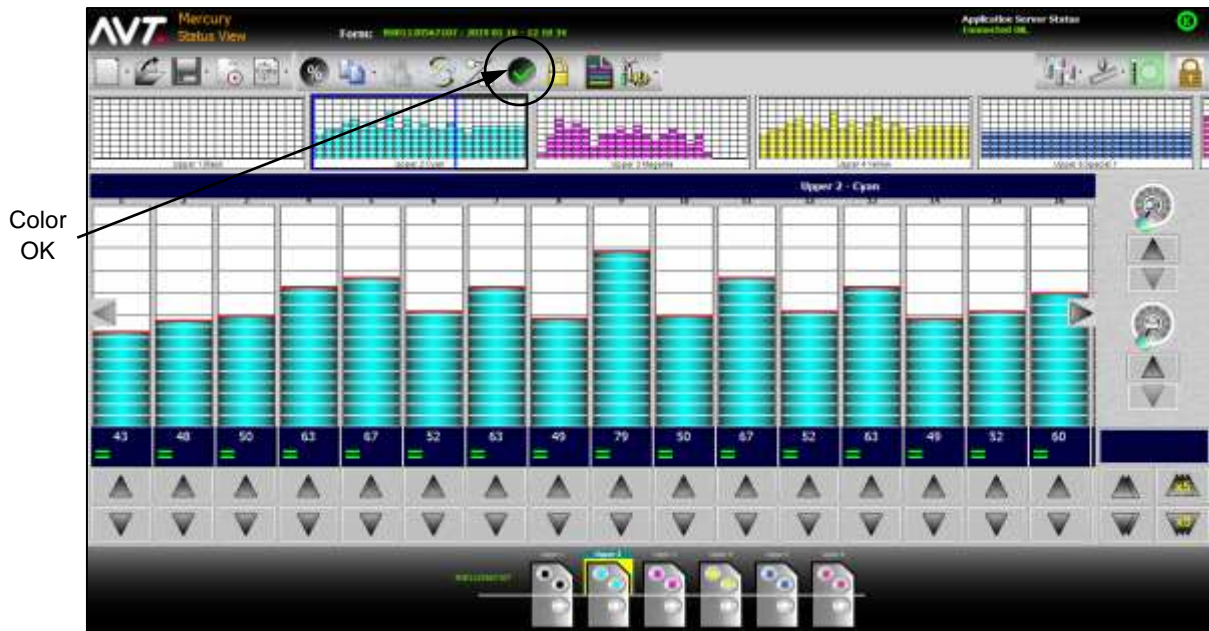
1	Touch one or more waters that you want to adjust.
2	<p>To adjust all of the selected waters at the same time, touch either of the Adjust All Waters buttons.</p> <p style="text-align: center;">OR</p> <p>To adjust all of the selected waters at the same time, touch and move the slider button on a Water Sweep Gauge or touch the Adjust Water Sweep Up or Down buttons for any one of the selected waters.</p> <p>Note: If no waters are selected on the Water All screen, the Adjust All Waters buttons are applied to all waters.</p>
3	<p>Touch the Run Sweep button.</p> <p>The selected waters display their new water settings.</p>  <p style="text-align: center;">After adjust selected waters (Upper 1, Upper 3, and Upper 5)</p>

4.5 Save Current Ink Profiles with Color OK

After specifying the ink profile for the currently loaded form, you can save the ink profile using the Color OK feature.

Important: When using the CIP3 Presets wizard, touch Color OK to save the best ink profiles of a form and adjust the scan correction values for the selected paper type. See the *Mercury Advanced User's Manual* for more detailed information.

Touch the **Color OK** button on the main toolbar.



The Color OK message screen displays briefly, indicating the Color OK profiles are stored for the specified form name.



4.6 Send Ink Zone Settings to the Press

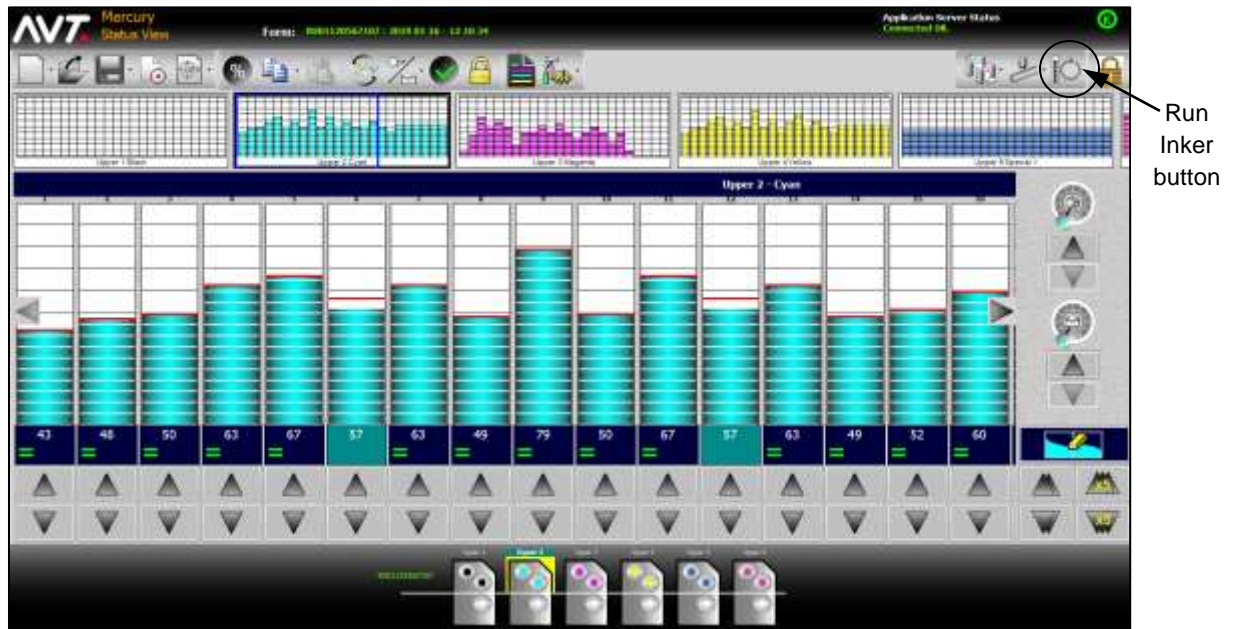
You can send ink zone settings to the press using **Run Inker** and **Set Press** buttons.

When first using the Mercury system, look at the ink fountain to relate the ink zone settings to the amount of ink on the fountain roller.

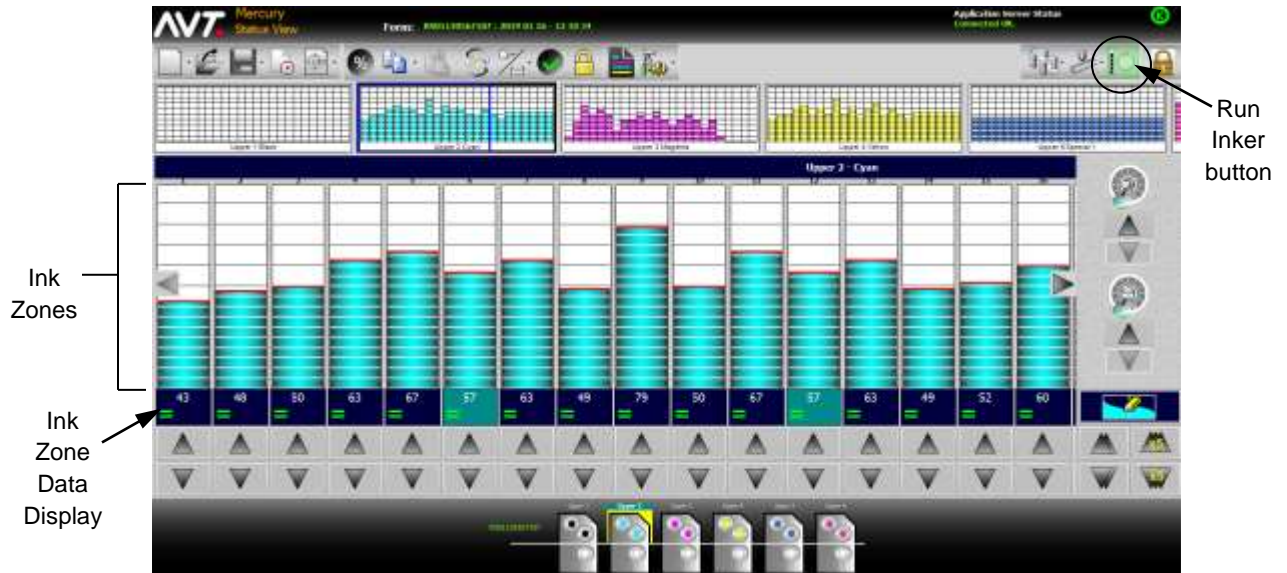
Hint: For quicker response and to avoid overcorrecting, start with too little ink rather than too much ink.

4.6.1 Using Run Inker

Touch the **Run Inker** button to set the ink zone adjustments for one or more selected ink fountains.



The Run Inker button light turns on and you will see the ink zone data display and ink zones update.



The Run Inker button is a toggle. When its light is on, you may continue to make changes to the ink zones and they go directly to the press. Touch the **Run Inker** button again to turn it off.

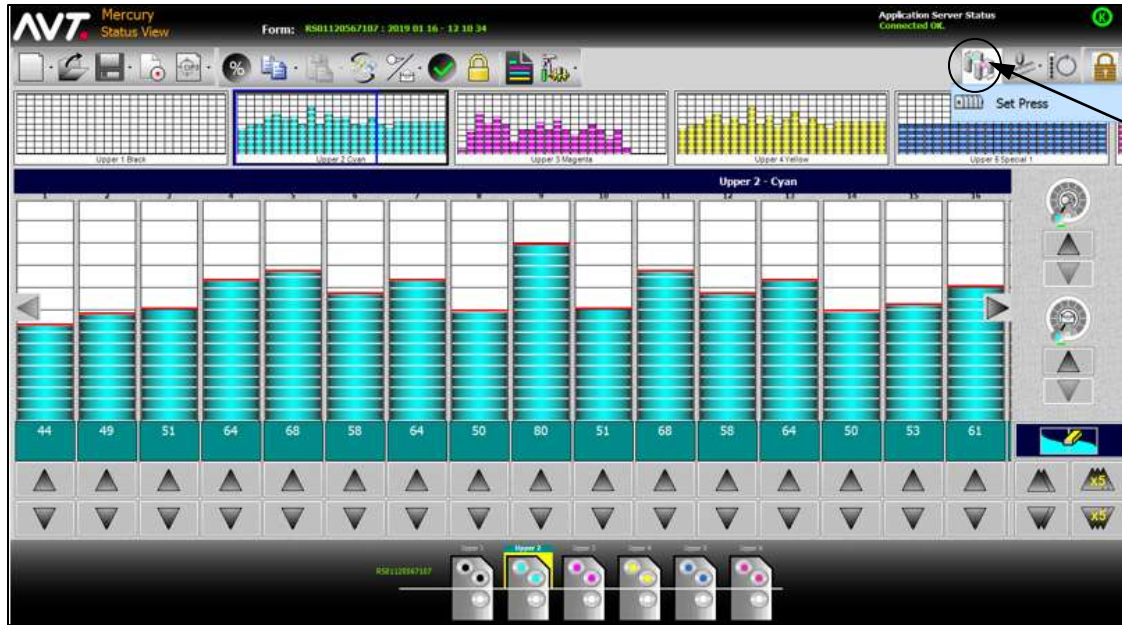
Note: When you choose to perform certain operations in Mercury while the Run Inker button is on, the system will automatically turn the Run Inker button off.

4.6.2 Using Set Press

Use Set Press to set all ink fountains on the press. The ink zone settings from the Mercury Status View are sent to all ink fountains on the press.

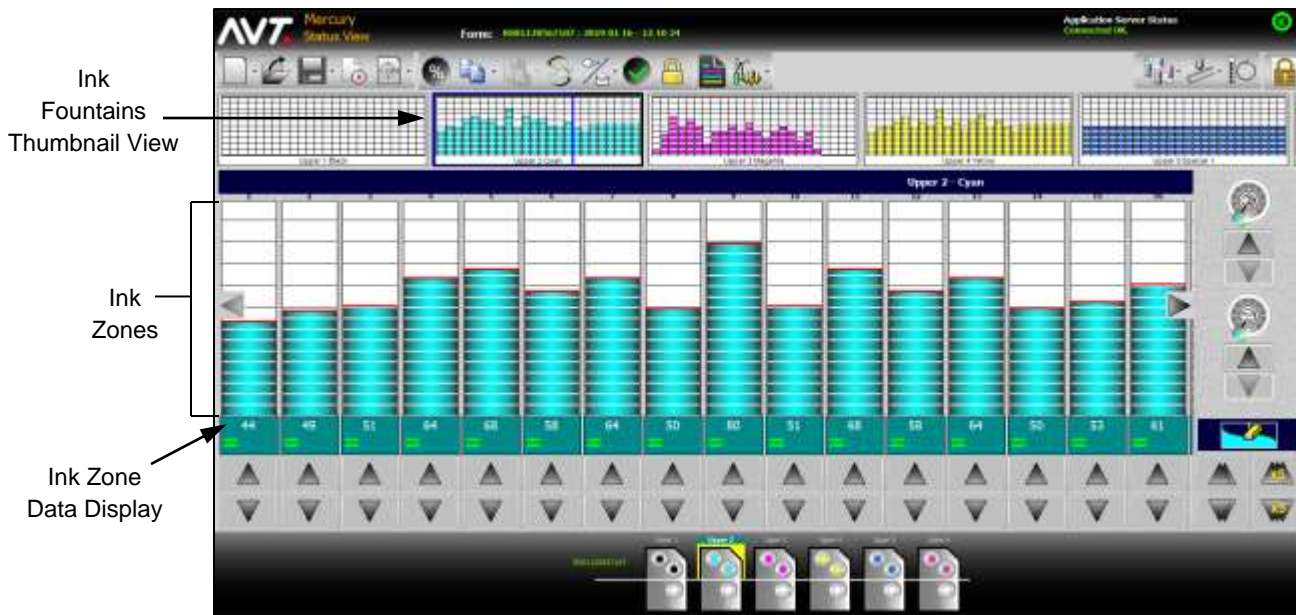
Note: If you are running a two-sided web press or a single-sided web press with turnbar, you will be given the option to set the press for the current form only or for both forms.

Touch the **Set Press** button and then touch the **Set Press** option from the drop-down menu.



Set Press button

For the currently selected ink fountain, you will see the ink zone data display values and ink zones updated. You will also see all other ink fountains update in the ink fountain thumbnails.



Note: When running a two-sided web press or a single-sided web press with turnbar, the press can be set for both forms or for the current form only.

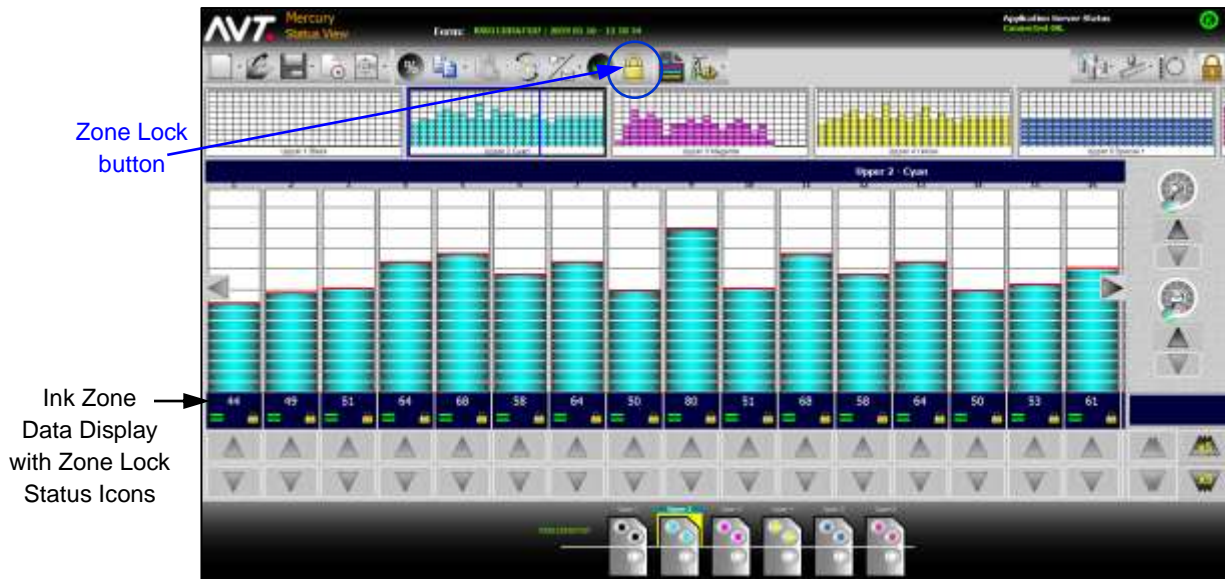
4.7 Use Zone Locks

After adjusting ink zone values, you can lock the values using the Zone Lock button. You can lock and unlock all ink zones and selected ink zones for an ink fountain.

Pressing the Zone Lock button without zones selected will invert the zone lock status on each of the fountain zones.

Note: Locked zones will not change the zone values.

The **Zone Lock** button is on the main toolbar, to the right of the Color OK button. Lock icons will display in the **Ink Zone Data Display** area on the Status View.



4.7.1 Reviewing Zone Lock Status

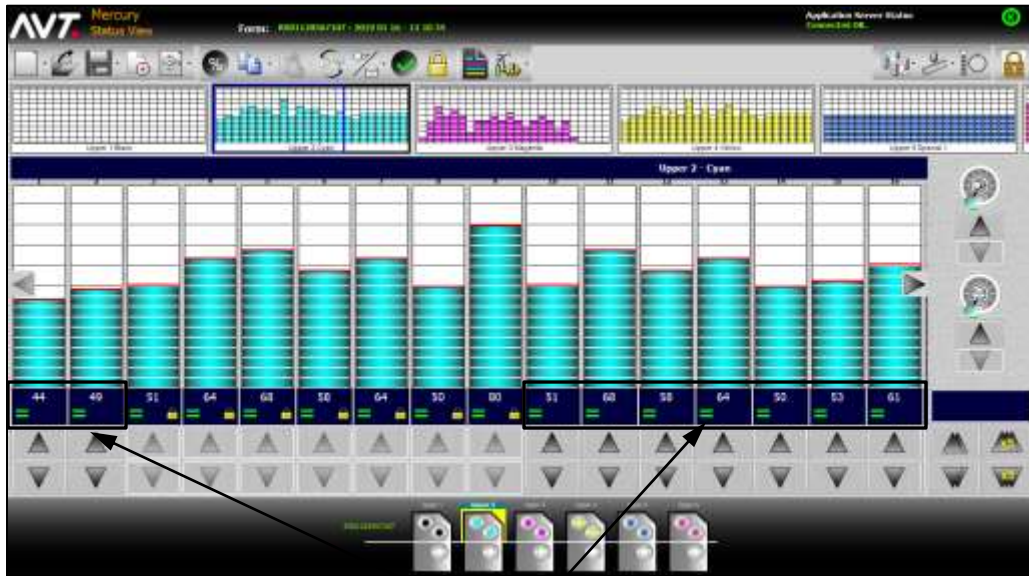
The **zone lock status icons** display next to the status icons for the zones.

- The Zone Lock button on the main toolbar is always enabled.
- When you click on the Zone Lock button from the toolbar, all zones from the selected inker will be locked. If the zones are already locked, they will be unlocked.
- If you select both locked zones and unlocked zones, and then click on the Zone Lock button, the selected zones lock status will be reversed.
- Zone lock status should be synchronized on all the clients. When a zone is locked or unlocked, the status is updated on all of the clients.
- When a new form is created, all the zones are unlocked. When a form is ended, zone lock status for all zones is set to unlocked.

4.7.2 Locking and Unlocking Ink Zones

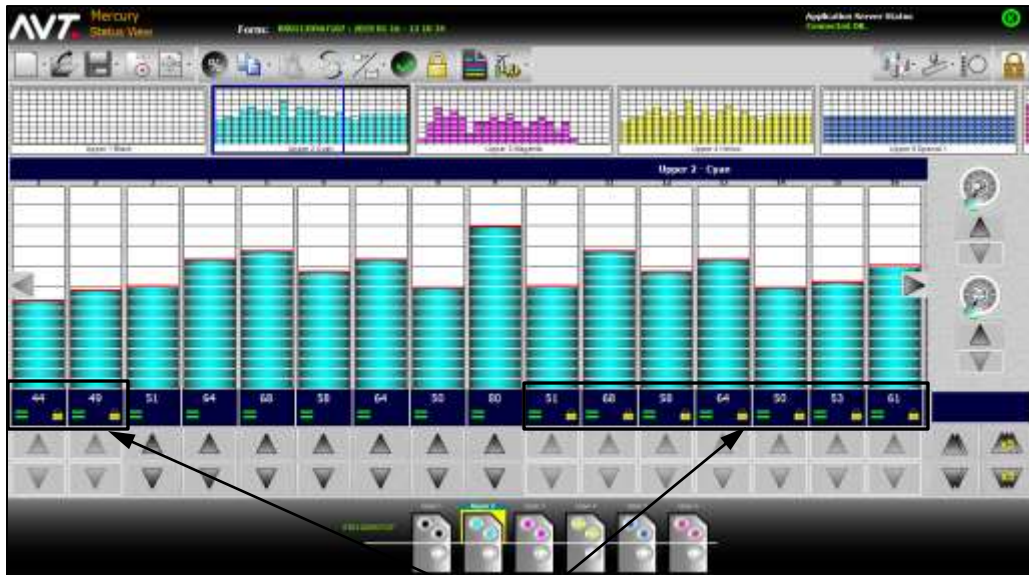
No Zones Selected

The Status View below shows the **unlocked zones** with no zones selected.



(Unlocked zones)

Clicking the **Zone Lock** button with no zones selected reverses the zone lock status.



(Locked zones)

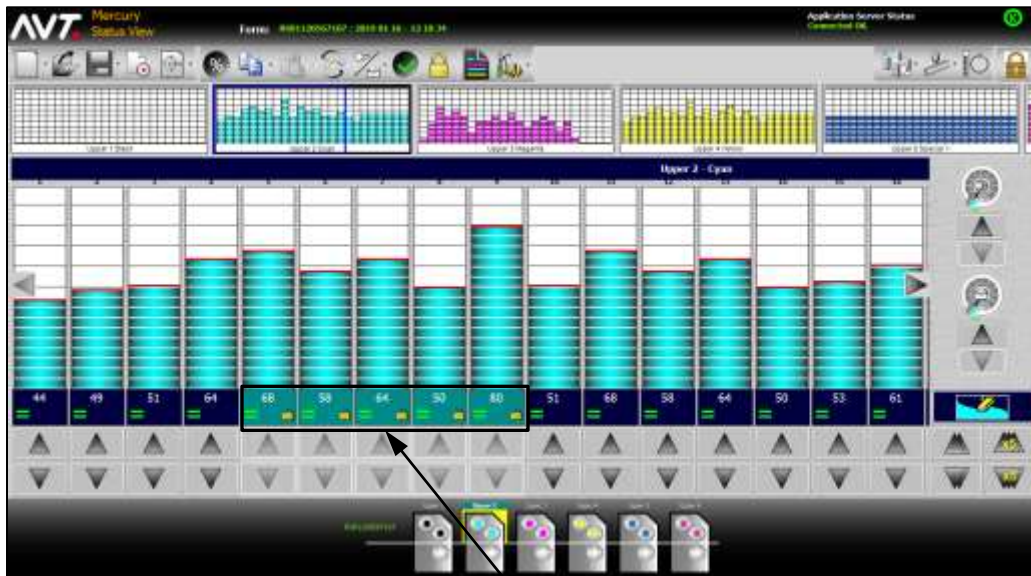
Zones Selected

The Status View below shows the unlocked zones for selected zones.



(Unlocked zones)

Clicking the **Zone Lock** button reverses the zone lock status for the selected zones.



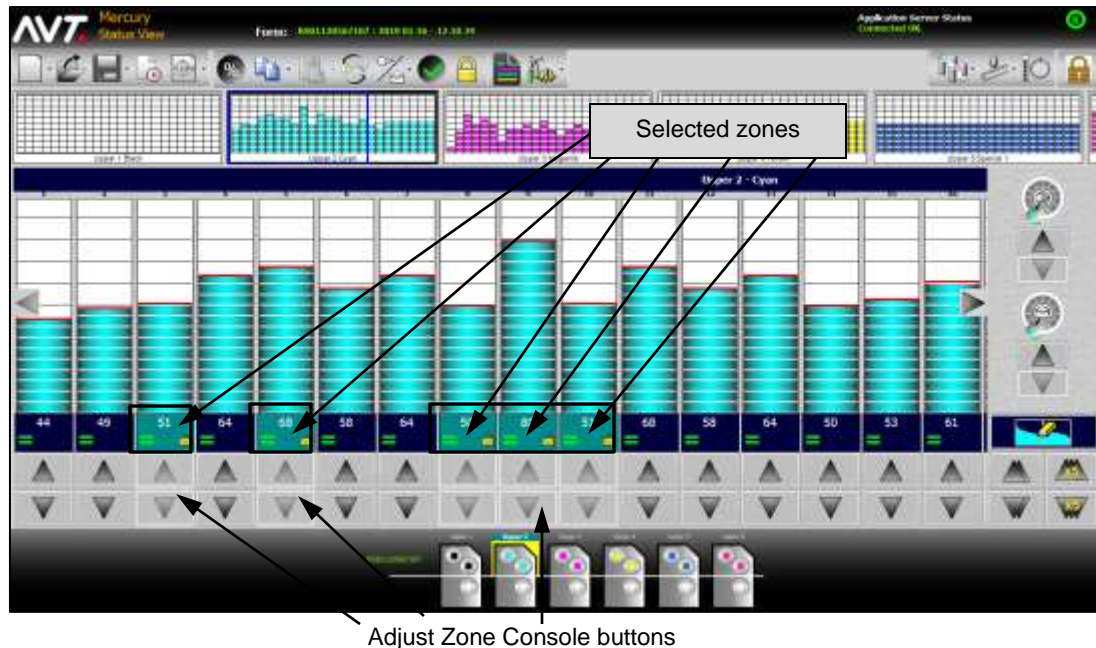
(Locked zones)

4.7.3 Using Adjust Ink Console Buttons with Zone Locks

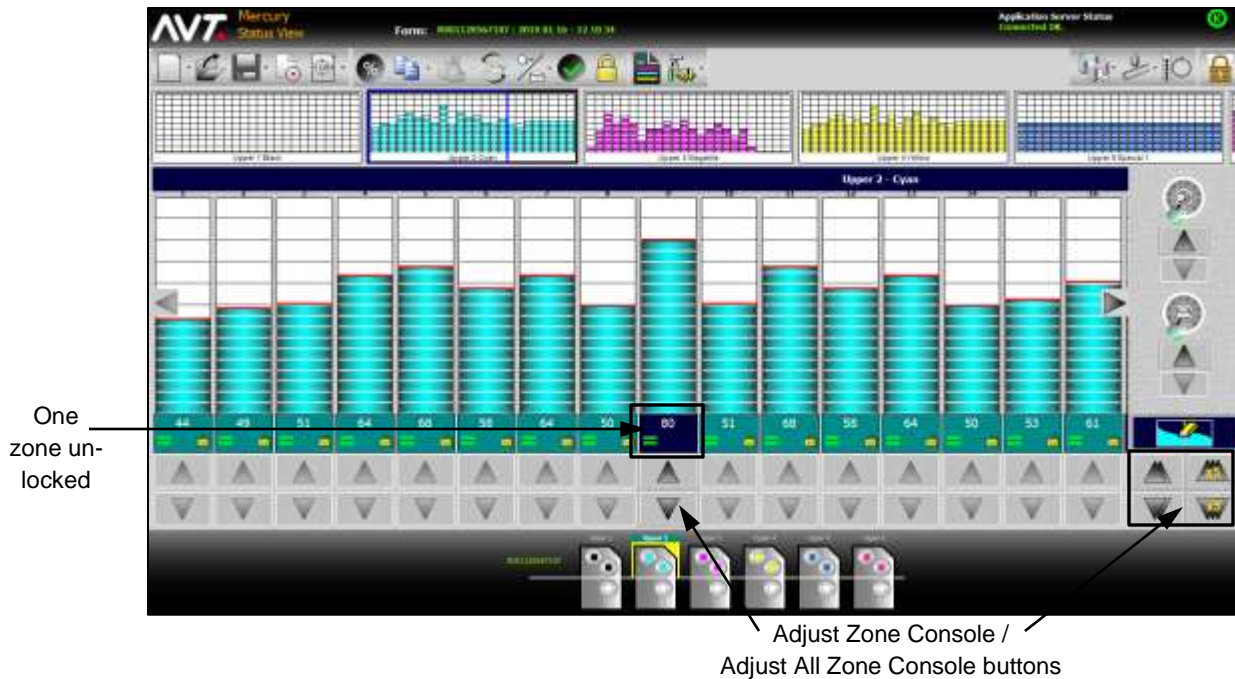
When all zones are locked, the **Adjust Zone Console** buttons for all the zones and **Adjust All Zone Console** buttons will be disabled.



If you select some zones and click on the Zone Lock button, the **Adjust Zone Console** buttons of the selected zones will be disabled.



If at least one zone is unlocked, the **Adjust Zone Console** button for that zone and the **Adjust All Zone Console** buttons will be enabled. The Adjust Zone Console buttons for all other zones will be disabled.



4.7.4 Making Ink Zone Adjustments with Zone Locks

% Inc / Dec	When a user increments values using % Inc/Dec, the changes only apply to the unlocked zones. Locked zones are not affected.
Copy / Paste	When a user changes the zone values using Copy/Paste, the changes only apply to the unlocked zones.
Swap	When two inkers are swapped, the values, ink types, and zone lock status are swapped between the two inkers.

4.8 View Status of All Inkers from Summary View

The Summary View allows you to view the current status of all inkers.

- Displays inkers in a row per form.
- Each inker displays the zone profiles similar to how they are shown in the thumbnail view. These displays get updated whenever there is a change in the inker profiles.
- Each inker panel includes a column of icons to represent the state of the inker. Inker state includes current sweep value, water value, and inker error status.
- View is draggable in both directions (horizontal and vertical).
- A sidebar panel allows zoom in and zoom out (zoom range is 50-500%).

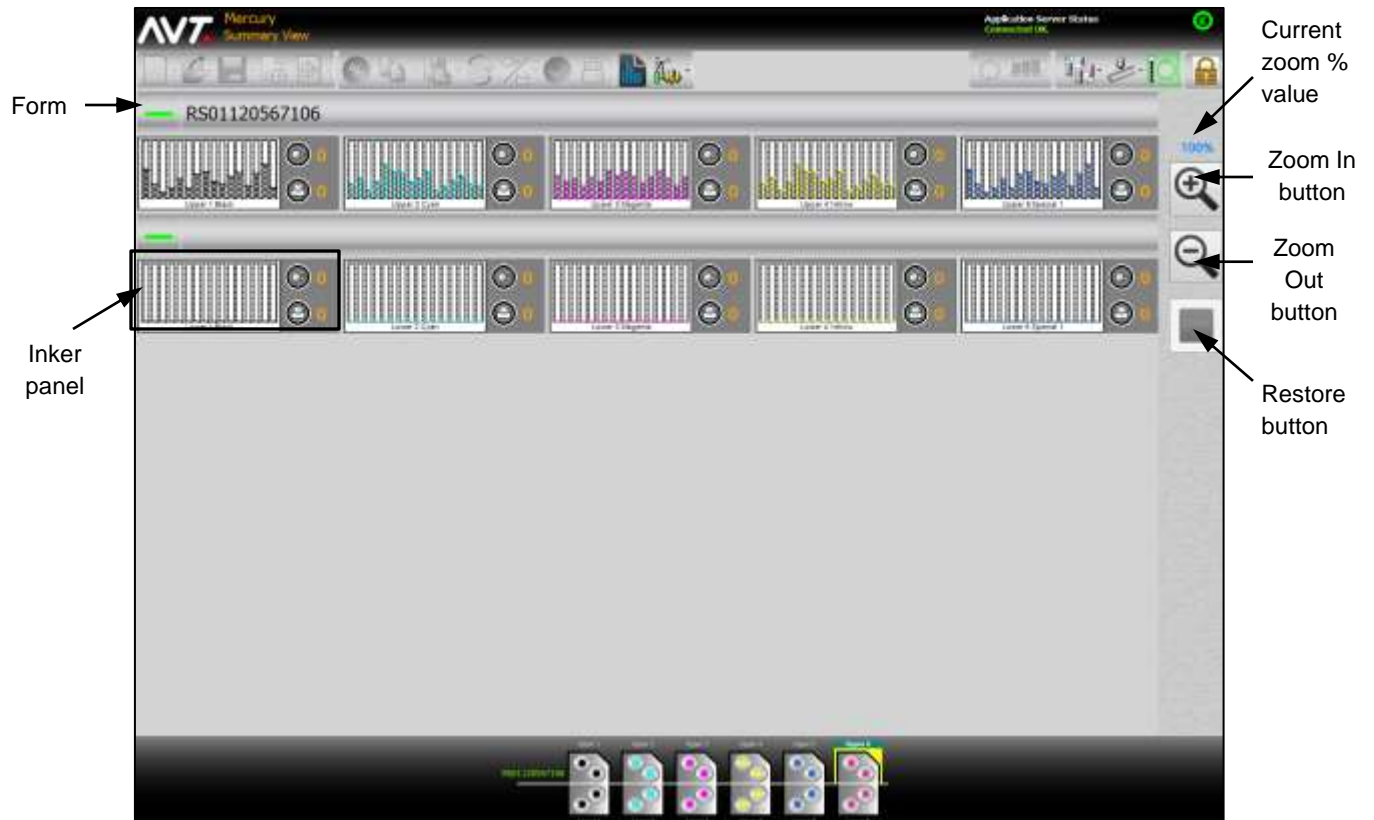
Note: If CLC is enabled, the Summary View supports “key positions” display mode and “target/scan density” mode.

4.8.1 Invoking Summary View

On the Mercury Status View, touch the **Summary View** button.






The Summary View displays with the status of all the inkers.



Note: The Summary View button is a toggle button, so touching it again takes you back to the Status View.

You can use the following sidebar buttons to control the Summary View display.

	<p>Zoom In to enlarge the display of inker panels.</p>
	<p>Zoom Out to compress the display of inker panels.</p>
	<p>Restore the display to a normal scale (100%).</p>

4.8.2 Using Summary View

Summary View with Sweep and Water Controls

When Sweep and Water controls are enabled, you can view the sweep and water icons and current on-press values for each inker.




Summary View with Expanded / Collapsed Forms


The Summary View can display multiple forms in a single view. Each form displays in a separate row and by default every form is in the expanded state.

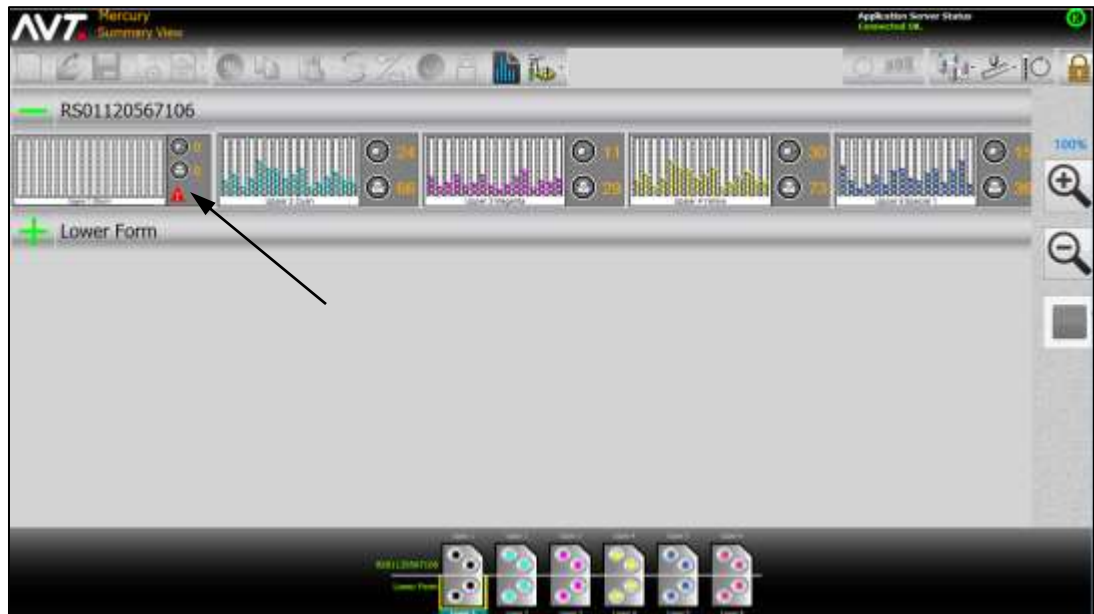
The  (green minus icon) indicates the form is expanded.



The  (green plus icon) indicates the form is collapsed.



The  (red triangle icon with exclamation point) indicates the inker has errors.



5 Using Optional Features in Mercury

This section provides a brief overview of the optional Mercury features:

- Closed Loop Control (CLC)
- CIP3 Presets
- Single-Sided Web Press with Turnbars
- Two-Sided Web Press
- Multiple Web Press
- Tower Press
- Newspaper Press
- Auto Zero
- Job Management
- PLC Ink Sweep and Water Controls
- CIC Press
- Register Motor Moves

Note: These features are only available if your system was configured for them during system installation. See the *Mercury Advanced User's Manual* for more detailed information.

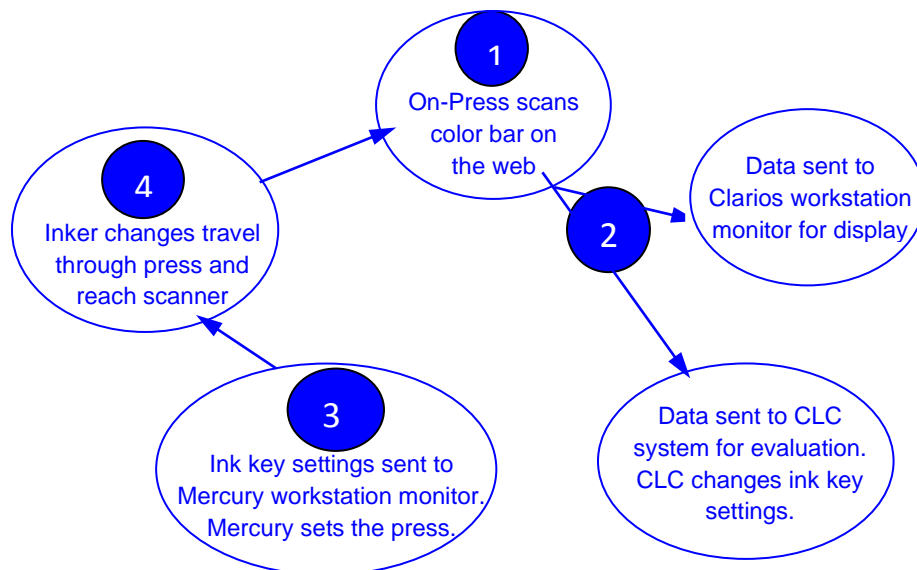
5.1 Closed Loop Control (CLC)

The CLC feature provides a closed loop link between the Clarios color measurement system and the Mercury remote ink control system for narrow web presses.

The GMI on-press scanner scans the moving web and sends density values to the CLC system and to the Clarios workstation monitor for display. The CLC system evaluates the data, formulates the ink key settings, and then transmits the ink key settings to Mercury. Mercury then uses the ink key settings to set the press.

When the inker changes have traveled through the press onto the paper and to the scanner, the results of the inker changes are re-scanned and compared to the target densities. More inker changes are made, as necessary, to bring the job to color.

The following diagram shows the closed loop process.



You must set up the CLC interface between the Mercury and Clarios systems. The Mercury and Clarios systems must be synchronized, with the inker names and form numbers exactly the same on both systems.

As the press runs, changes to the scan density settings on Clarios will cause the ink fountains on Mercury to change.

During closed loop control, you can make adjustments to the fountain console target density values using Mercury. You can also make changes from the Key Values Mode in Clarios.

Note: See the *Mercury Advanced User's Manual* for more detailed information on using the CLC feature.

5.2 CIP3 Presets

The CIP3 Preset feature allows you to start a job with preset values, achieve required print quality quickly, and reduce makeready time.

Note: See [Set Up CIP3 Presets](#) to learn more about setting up the CIP3 Presets. You create and start a CIP3 form for one surface at a time

A CIP3 form is similar to the standard form, but with presets. You can create and start a new CIP3 form with the required initial presets.

The basic process for creating a CIP3 form includes:

- Selecting a CIP3 presets file and assigning to a surface.
- Reviewing the preset colors and color preview image.
- Selecting paper type.
- Setting takeoff bars.
- Specifying whether to autoset press to preset values.

Note: See the *Mercury Advanced User's Manual* for more detailed information on using the CIP3 presets feature.

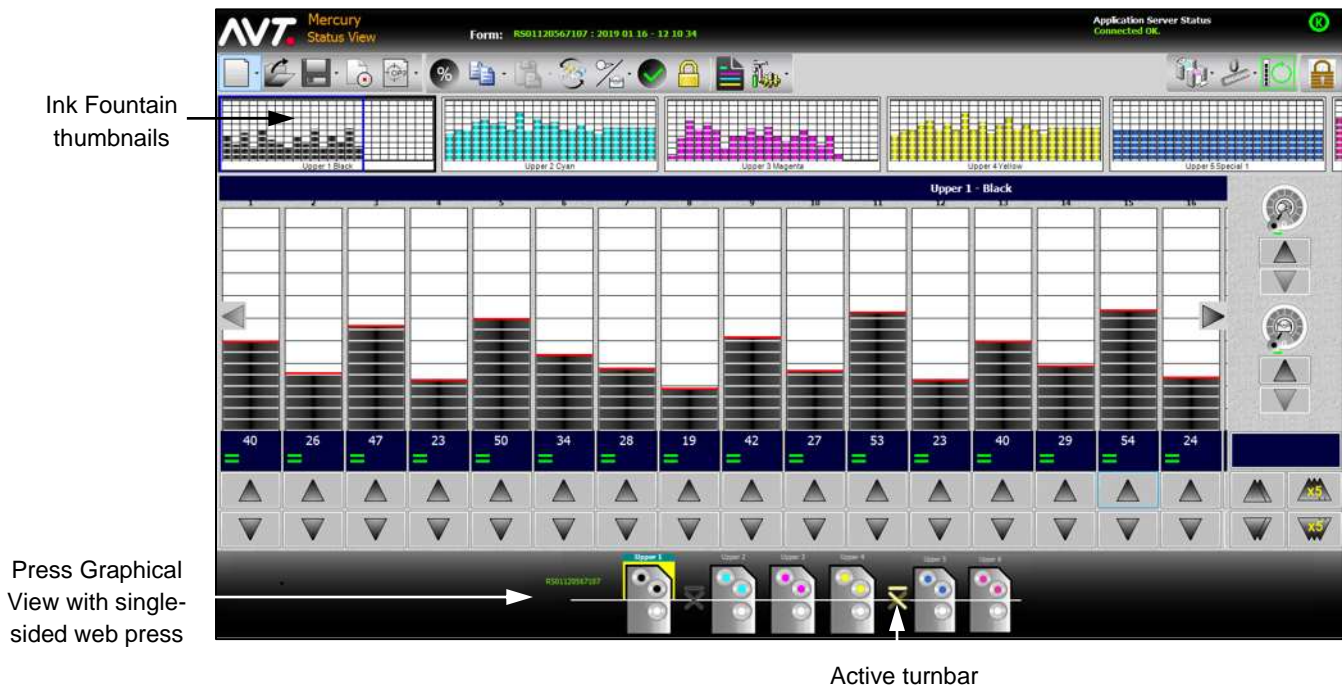
5.3 Single-Sided Web Press with Turnbar

Some single-sided web presses will have a turnbar to rotate the web after printing on one side of the web. This allows the ink fountains before the turnbar to print on the bottom side of the web and the ink fountains after the turnbar to print on the top side.

Note: Before the turnbar refers to the “bottom” surface and after the turnbar refers to the “top” surface”.

These web presses may have turnbars between several ink fountains, so operators can vary the number of ink fountains that print on the upper and lower surfaces on a form-by-form basis.

The following figure shows a single-sided web press with two turnbars.



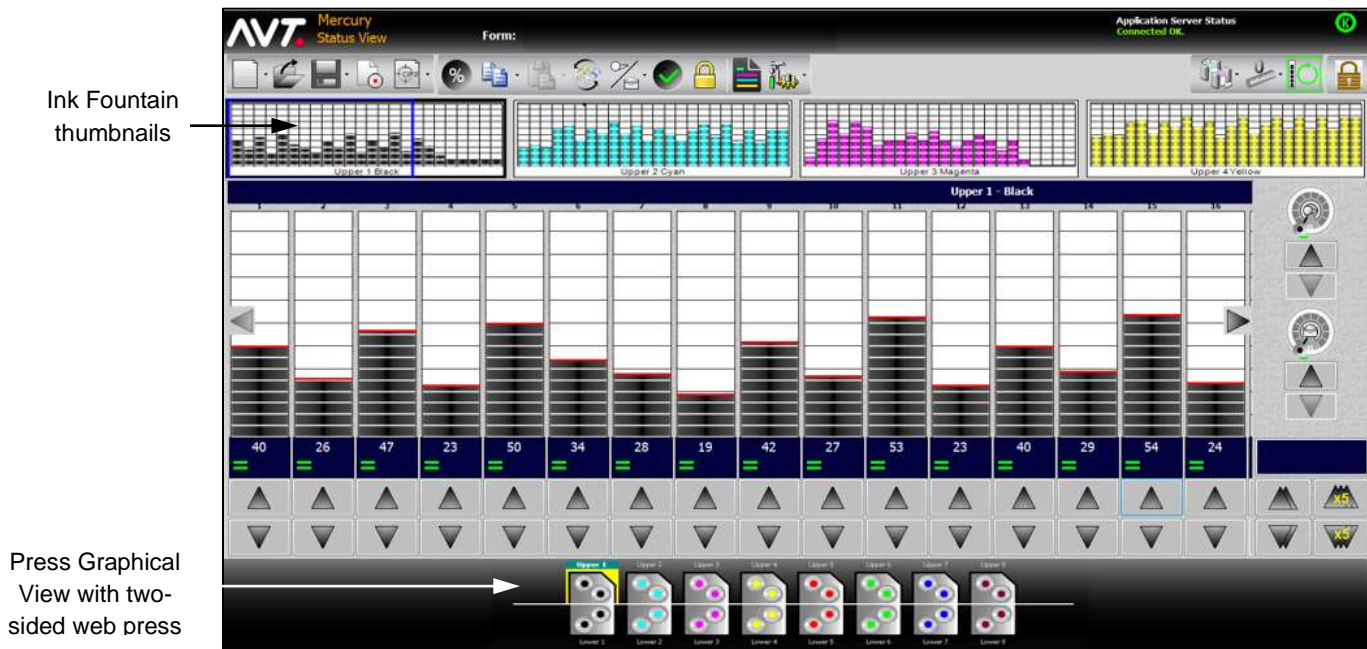
Note: See the *Mercury Advanced User's Manual* for more detailed information on a single-sided web press with turnbars.

5.4 Two-Sided Web Press

A two-sided web press lets you simultaneously control two forms running on a single web press.

For a two-sided web press, each ink fountain will have an upper and lower ink surface. You can create two forms, one for the upper surface and one for the lower surface.

The following figure shows a two-sided web press.



All of the ink fountains display the upper and lower surfaces in the Press Graphical View. However, the ink fountain thumbnails only display the ink fountains for the currently selected surface.

Note: The ink fountains for the upper surface must be assigned to one form and those for the lower surface to another form.

You can only make ink zone adjustments for the currently selected surface.

You can only copy and paste ink zones for the currently selected surface. You cannot copy and paste ink zone settings from one surface and paste into another.

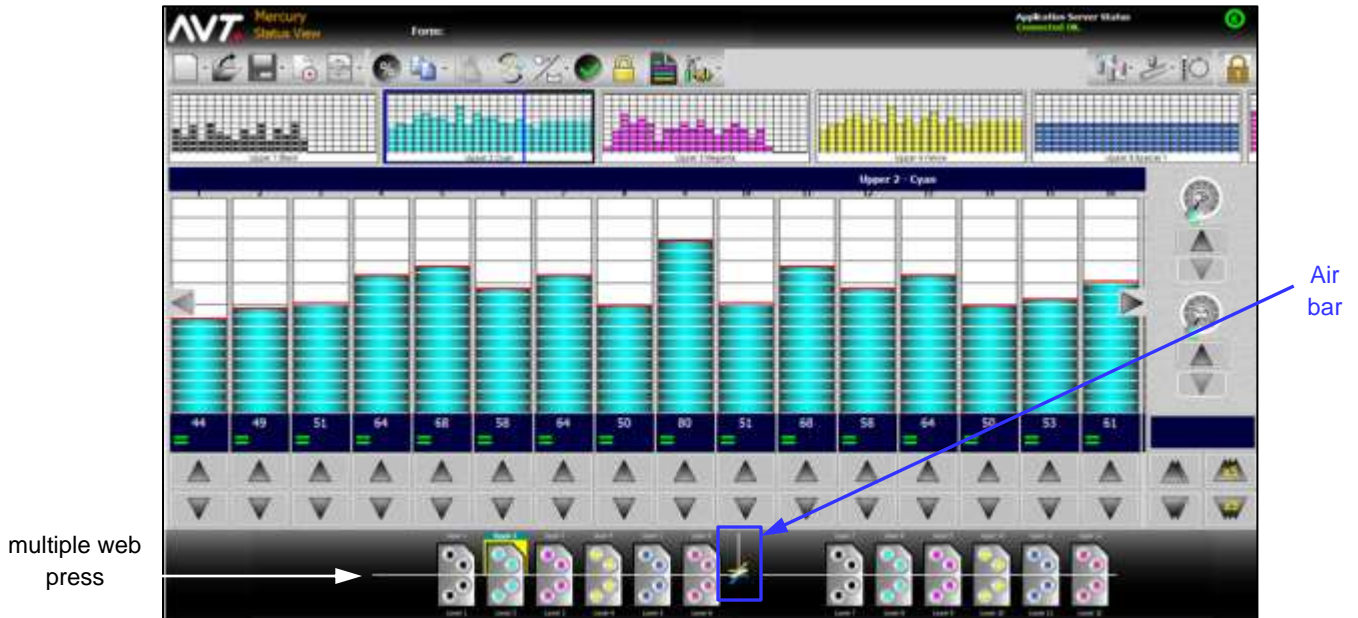
Note: See the *Mercury Advanced User's Manual* for more detailed information on a two-sided web press.

5.5 Multiple Web Press

A multiple web press is any commercial press with perfecting units (upper and lower) and configurable air bars, to allow two or more webs to be printed at the same time.

Normally only two webs are configured, but Mercury allows up to five webs to be printed at the same time. Most multiple web presses are configured horizontally or used in multi-tiered structures.

The following figure shows a multiple web press with one air bar.

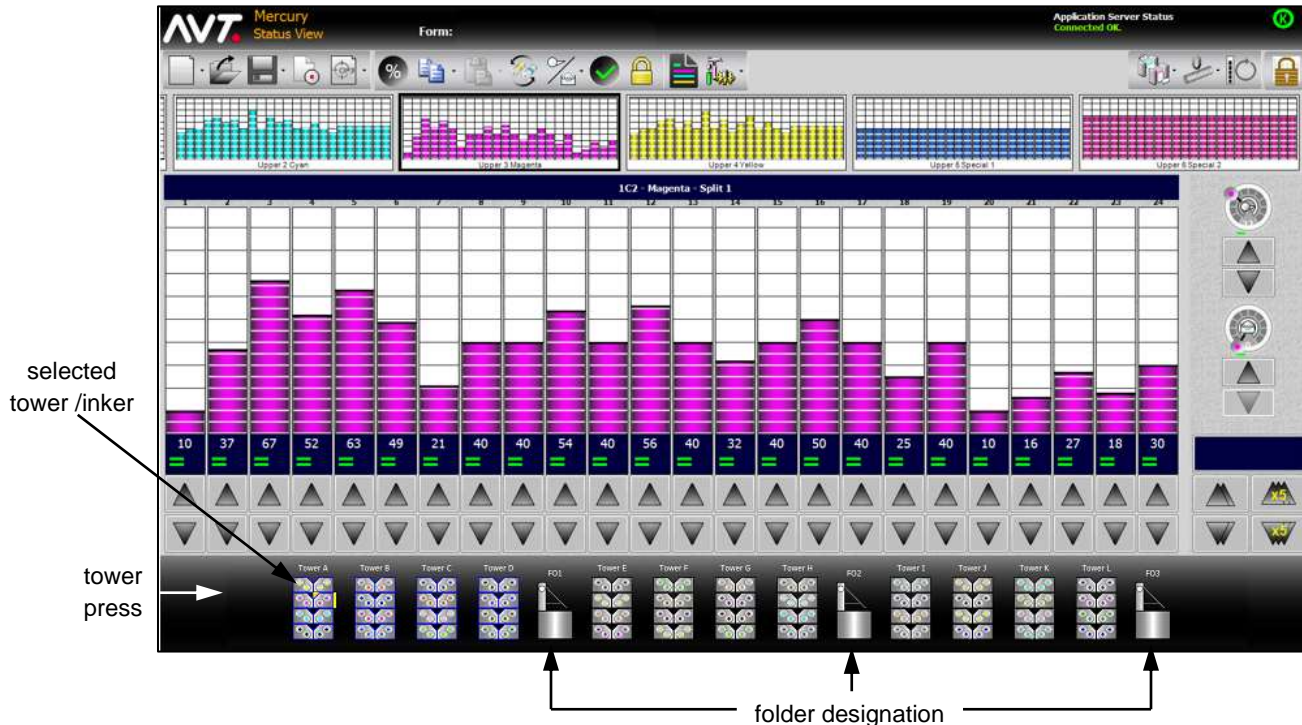


Note: See the *Mercury Advanced User's Manual* for more detailed information on a multiple web press and turning on press split configuration.

5.6 Tower Press

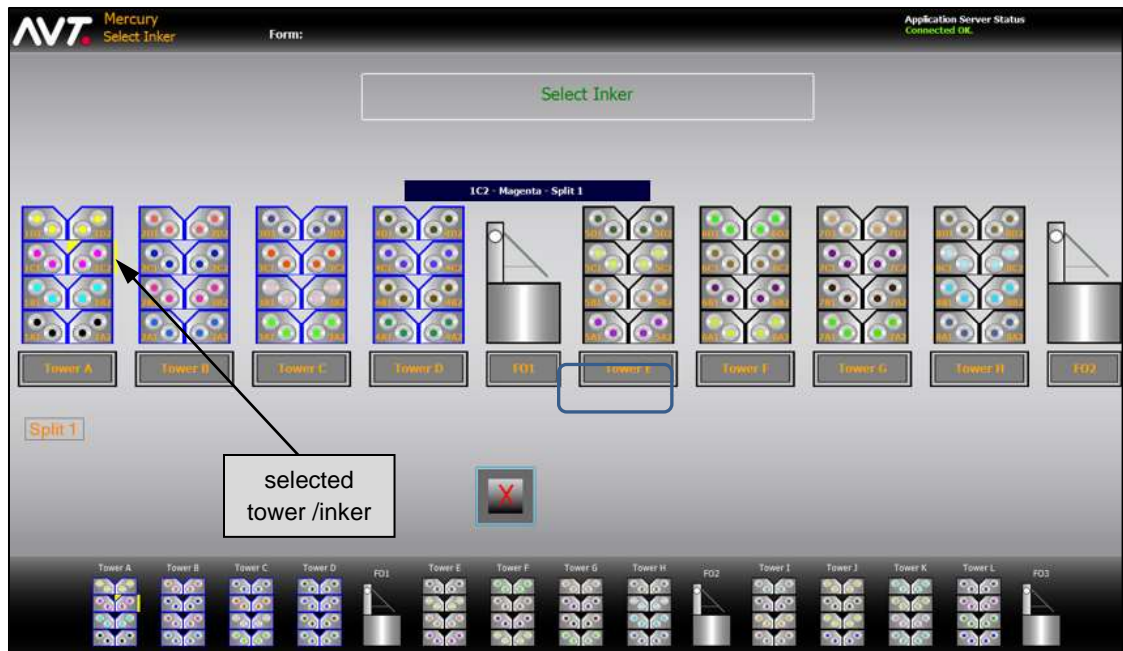
A tower press is a group of vertically arranged printing units with one or more webs printing at the same time. Each vertical arrangement is called a tower.

The following figure shows a 4-high tower press, with each tower having 8 inkers.



- Mercury supports one-to-four high printing units.
- Web routing could involve more than one tower for a single web, with up to 24 webs printed at the same time.
- Multiple towers can be configured into split press configurations, with up to 12 splits allowed at one time.
- CIP3 presetting can be augmented by imposition software (IMAPS) to allow easy color assignments and web routing of many webs.

When you click on a tower, the Select Inker screen displays where you can select a specific inker in a tower and access the Status View for that inker.

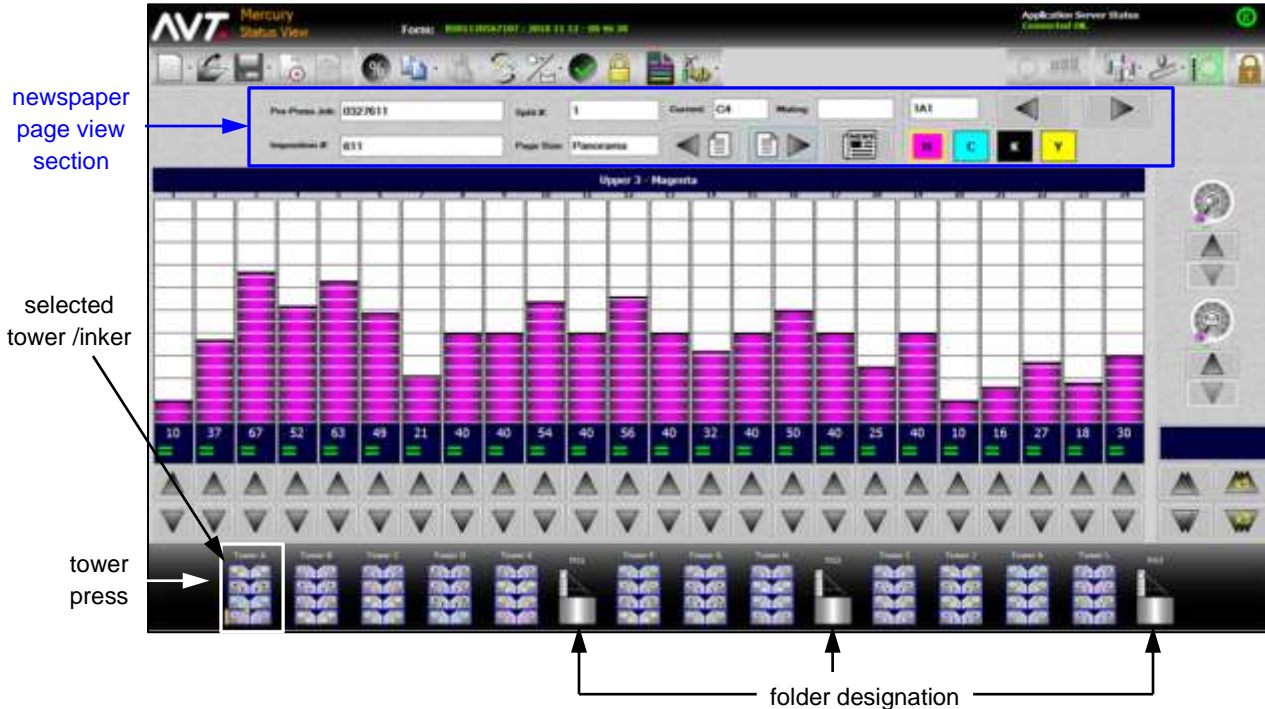


Note: See the *Mercury Advanced User's Manual* for more detailed information on the tower press.

5.7 Newspaper Press

A newspaper press is a special type of tower press that provides labor savings for large publications when printing on a newspaper style press.

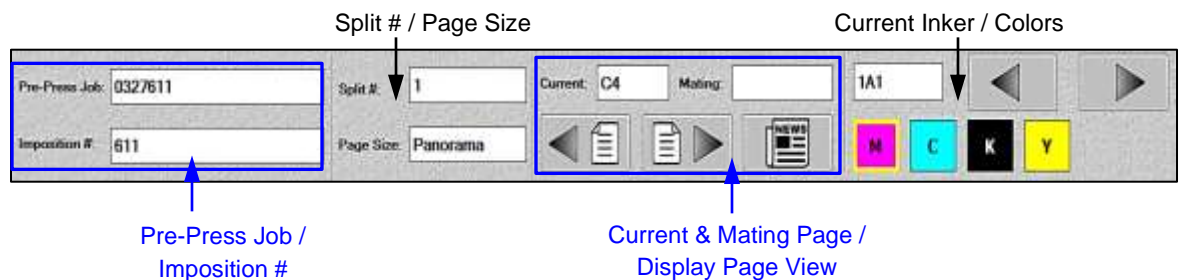
The following figure shows a 4-high newspaper tower press. Each tower has 8 inkers.



In addition to all of the tower press options, the Mercury newspaper press will have a newspaper page view section on the Status View.

Newspaper Page View Section


When newspaper mode is enabled, the ink fountain thumbnails section on the Status View is replaced with the newspaper page view section.

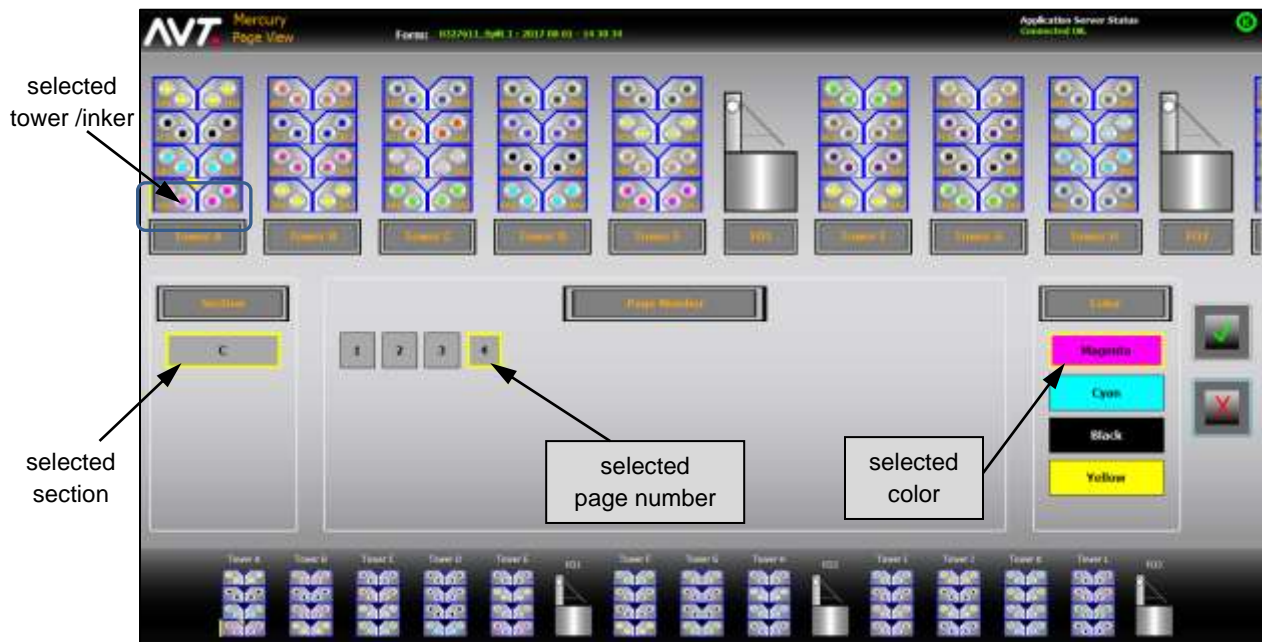


There are four sub-sections for the newspaper page view section:

- **Pre-Press Job / Imposition #** - Displays the pre-press job name and imposition form number.
- **Split # / Page Size** – Displays the split number of the current inker and the page size of the imposition form.
- **Current and Mating Page / Display Page View** – Displays the current page and mating page(s). Includes Previous Page and Next Page buttons to select between pages, and the News button to display the Newspaper Page View.
- **Current Inker / Colors** – Displays the current inker and all the colors that belong to the current section and page selected. Includes Previous Inker and Next Inker buttons to select by fountain, sequentially going through the press color by color.

Page View

When you select a tower and click on , the Page View screen displays where you can view and navigate to information about all sections of the current split.



- **Section** – Displays all sections of the current split.
- **Page Number** – Displays all pages of the selected section.
- **Color** – Displays all colors of inkers belonging to section and page selected.

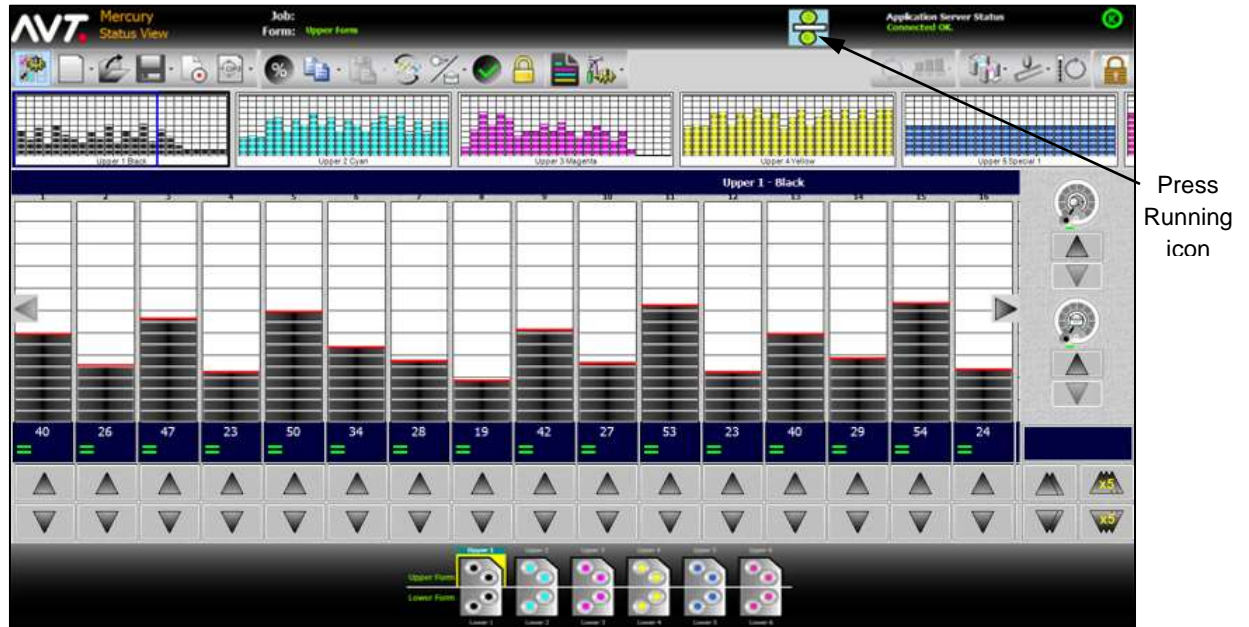
Navigating to any page in the current split requires selecting the section, the page number, and the color.


Note: See the *Mercury Advanced User's Manual* for more detailed information on the newspaper press.

5.8 Auto Zero

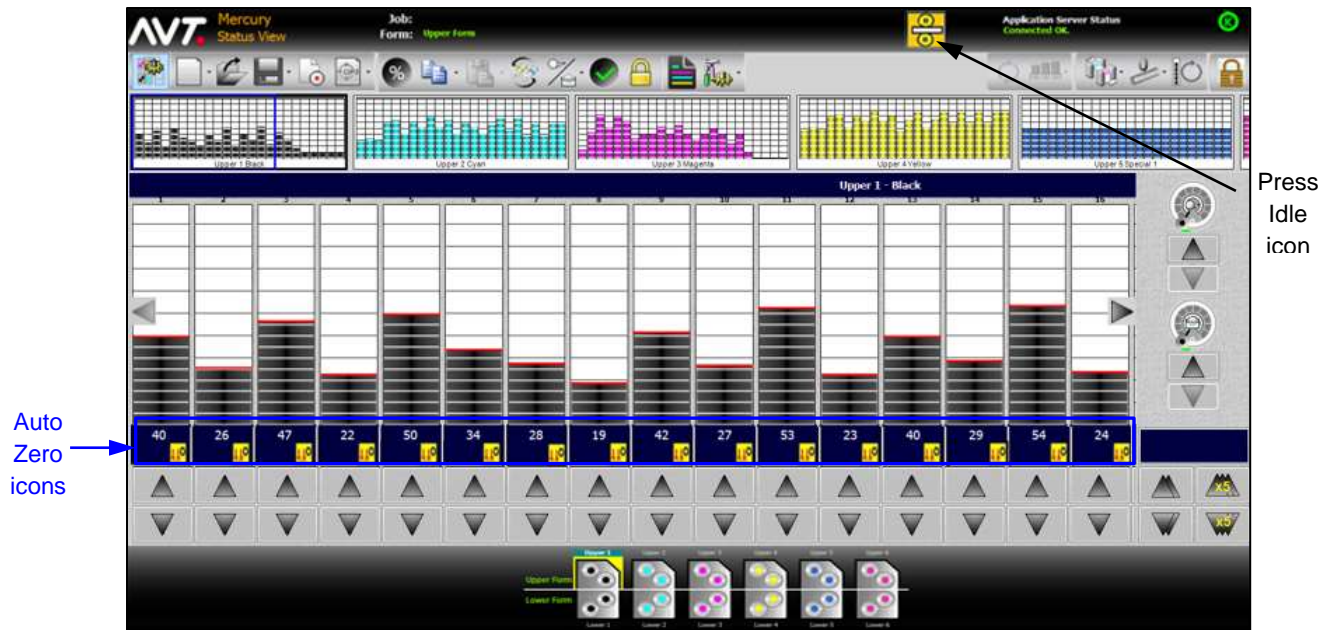
The Auto Zero feature detects when the press is in the idle state and temporarily moves all the fountain keys to zero percent. When the press starts running, the fountain keys are restored to their last known positions to continue press production. Icons display on the Mercury Status View to show that the press is idle or running.


The following figure shows the Mercury Status View when the press is running.



After the press is switched to the idle state, the icon on the view will change to . After a specified delay, zeroing of inkers will start and the view will reflect that zeroing is in process. Once zeroing is complete, the press will be in the idle state.

The following figure shows the Mercury Status View when the press is in the idle state.



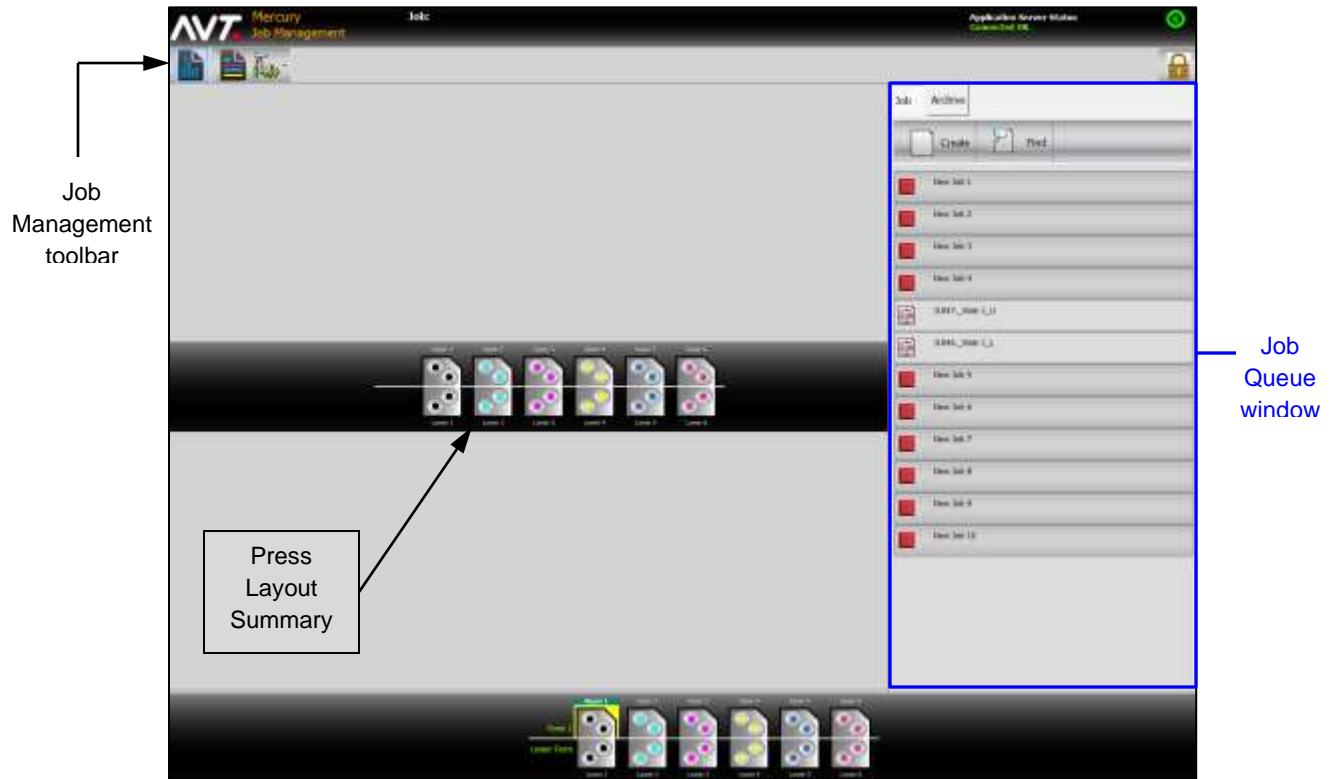
If the press switches from idle to running, the icon on the view will change to  and the zone settings will start to restore to the target values.

Note: See the *Mercury Advanced User's Manual* for more detailed information on the Auto Zero feature.

5.9 Job Management

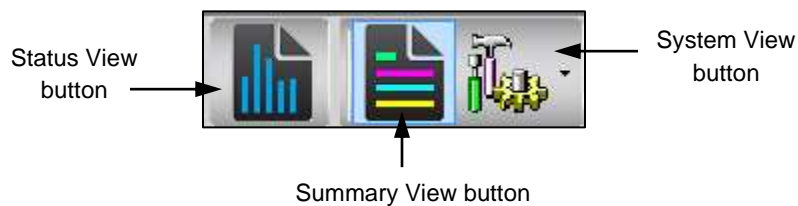
The Job Management view allows you to create a list of upcoming forms. Using this list, you can prepare jobs in advance that can be started quickly as each new job comes to press. Working in this view, you can create, configure, and operate different jobs in the queue.

When enabled, the Job Management View will be the default view and the initial view when you start the Mercury workstation application.



Job Management Toolbar

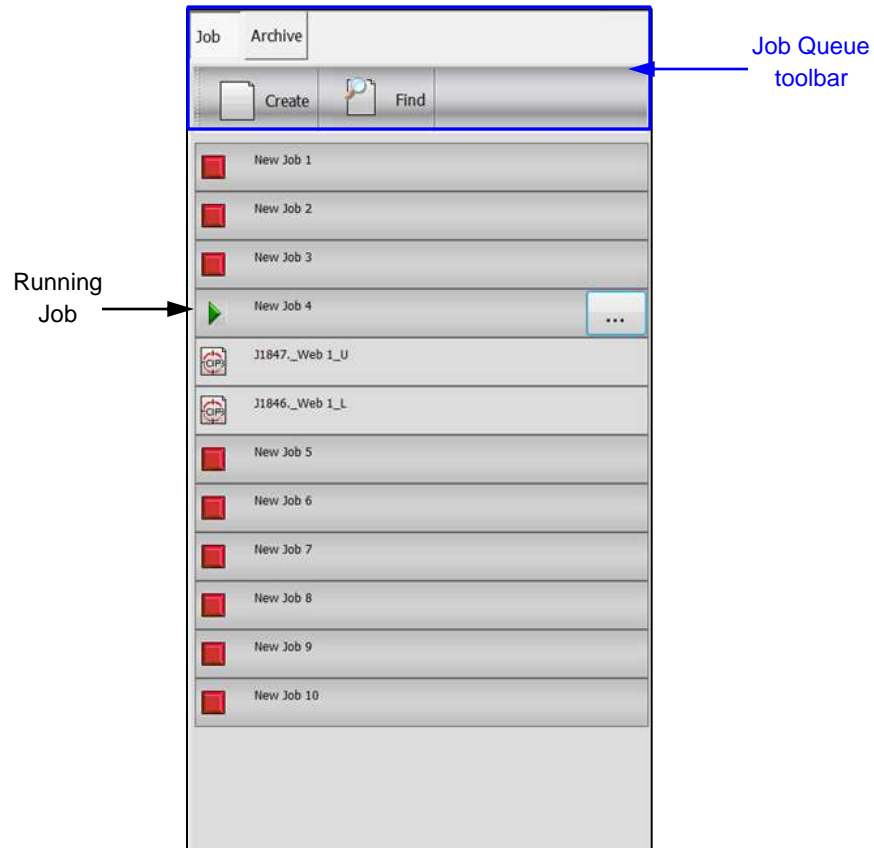
You can use the Job Management toolbar buttons to switch quickly to the Status View, Summary View, or System View.



Job Queue Window

The job queue window lists all the jobs available in the queue. A job can consist of one or more forms.

The job currently running is marked with a green triangle (▶), indicating the job has started. Other jobs marked with red boxes (■), indicate they are not currently running.



The job queue toolbar is at the top of the job queue.

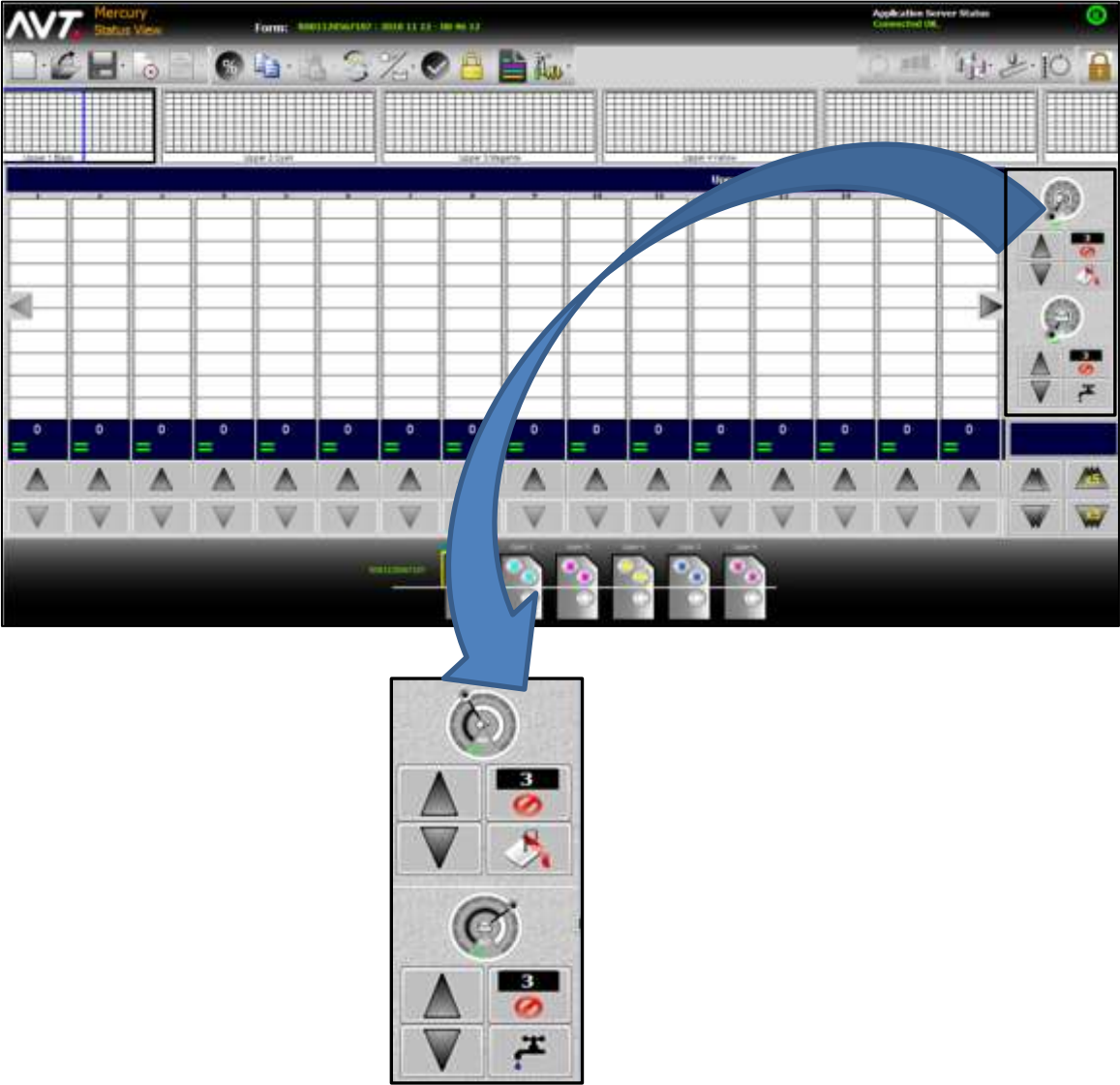
- **Job / Archive** – Lets you select either the current job or view the job archives
- **Create** – Allows you to create a job by keying a new name for the job.
- **Find** – Allows you to search for a job within the job queue.

Note: See the *Mercury Advanced User's Manual* for more detailed information on the Job Management view.

5.10 PLC Ink Sweep and Water Ramping

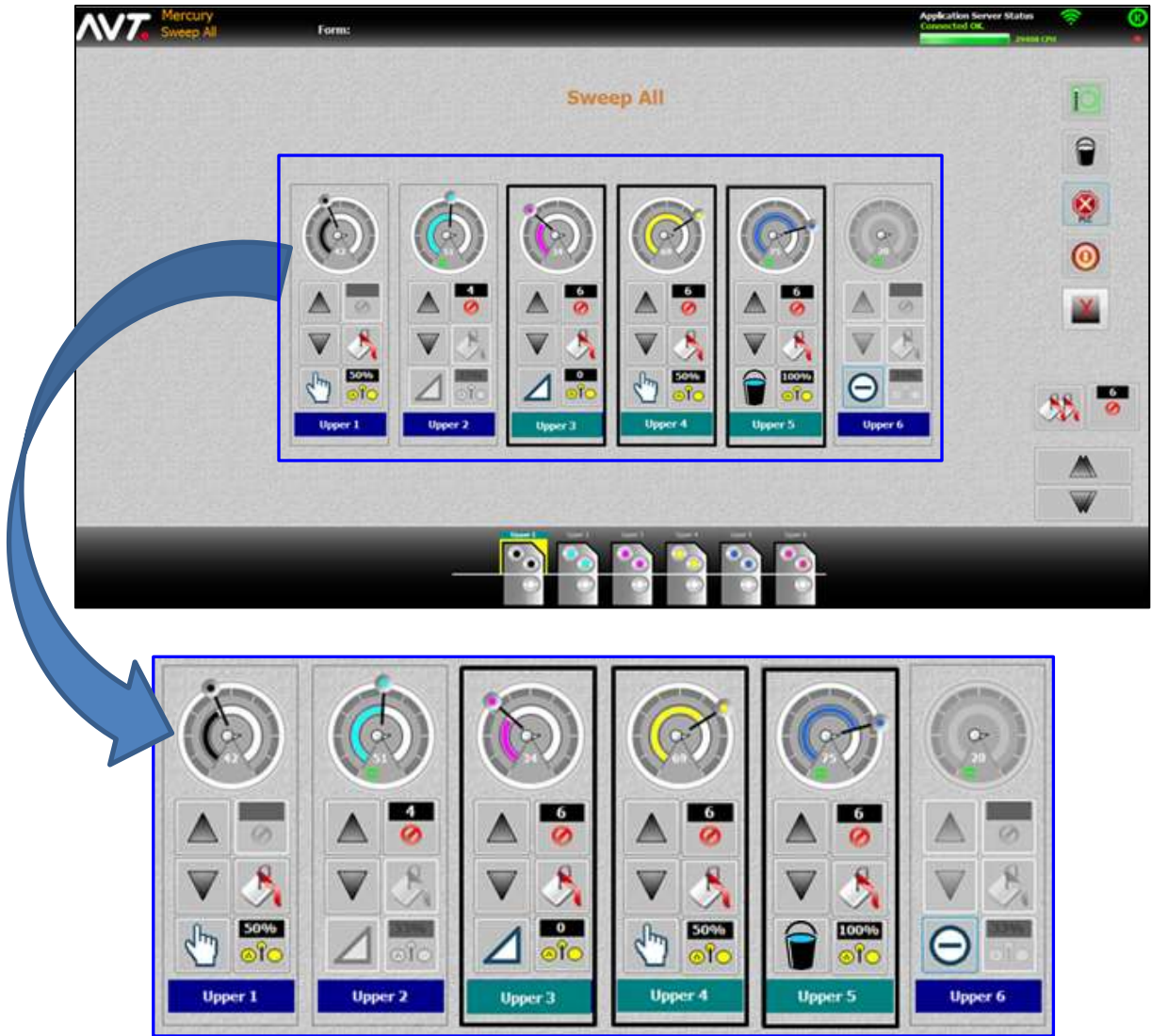
The ink sweep and water ramping feature allows you to control ink sweep and water ramping on the Mercury Status View, and also from the Mercury Sweep All and Water All screens.

The following figure shows the Mercury Status View with the Ink Surge and Flood buttons added to the Ink Sweep and Water Gauges.



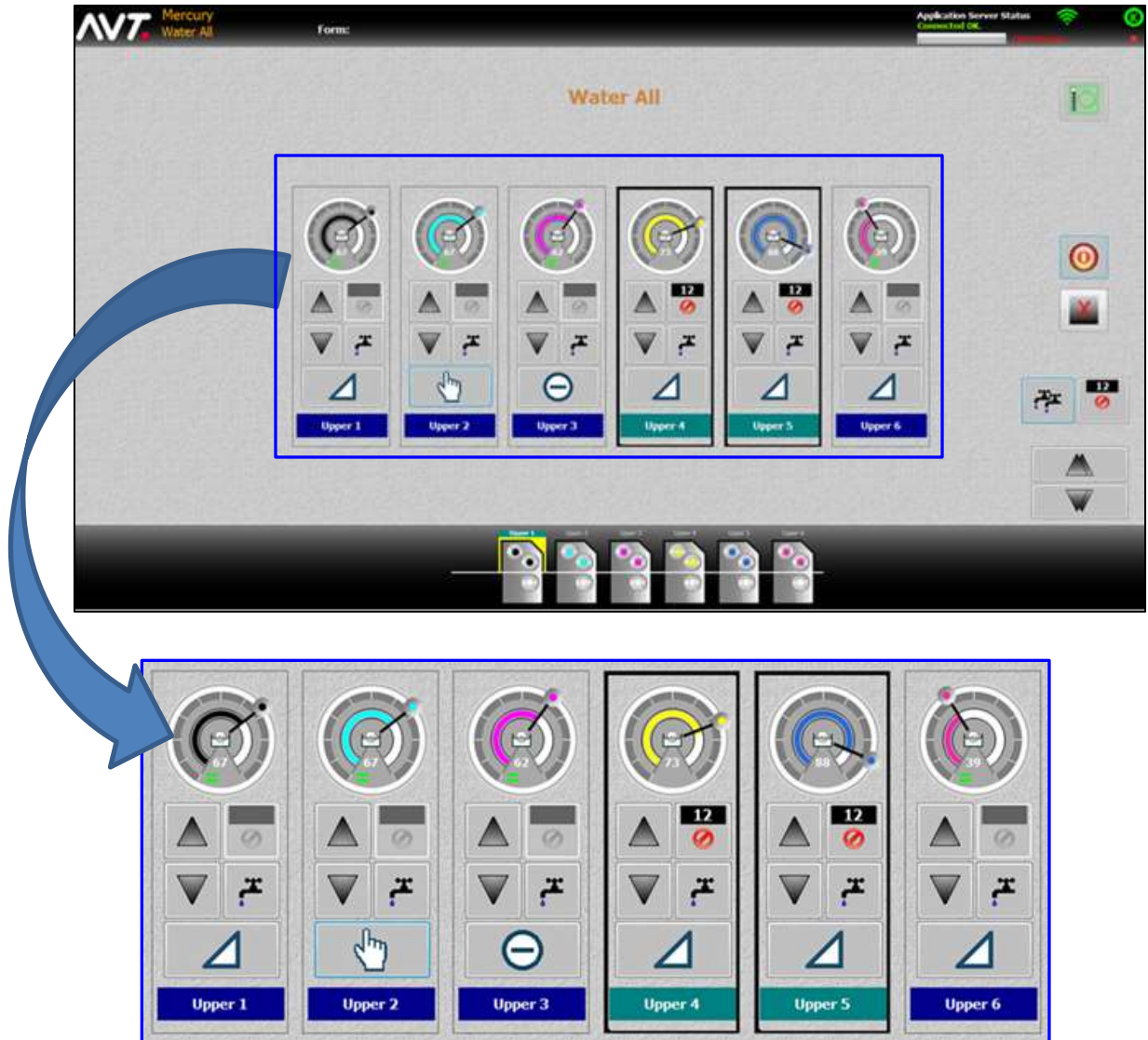
When ramping is enabled, you can adjust ink surge time for one or more inkers on the Sweep All screen.

The following figure shows the Sweep All screen with the Ink Surge buttons.



When ramping is enabled, you can adjust water flood time for one or more inkers on the Water All screen.

The following figure shows the Water All screen with the Water Flood buttons.

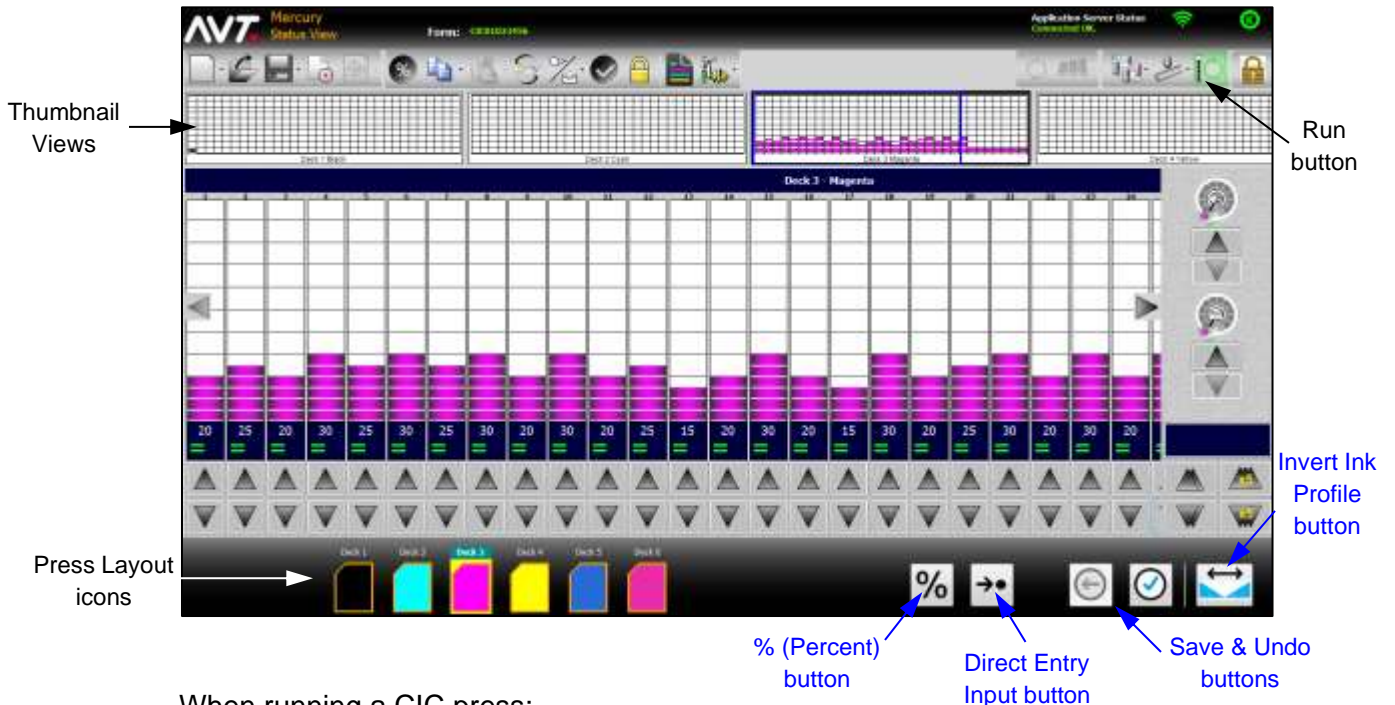


Note: See the *Mercury Advanced User's Manual* for more detailed information on using ink sweep and water ramping.

5.11 CIC Press

The CIC Press feature allows you to control a common impression cylinder (CIC) press from the Mercury Status View.

The following figure shows the Mercury Status View when running a CIC press.



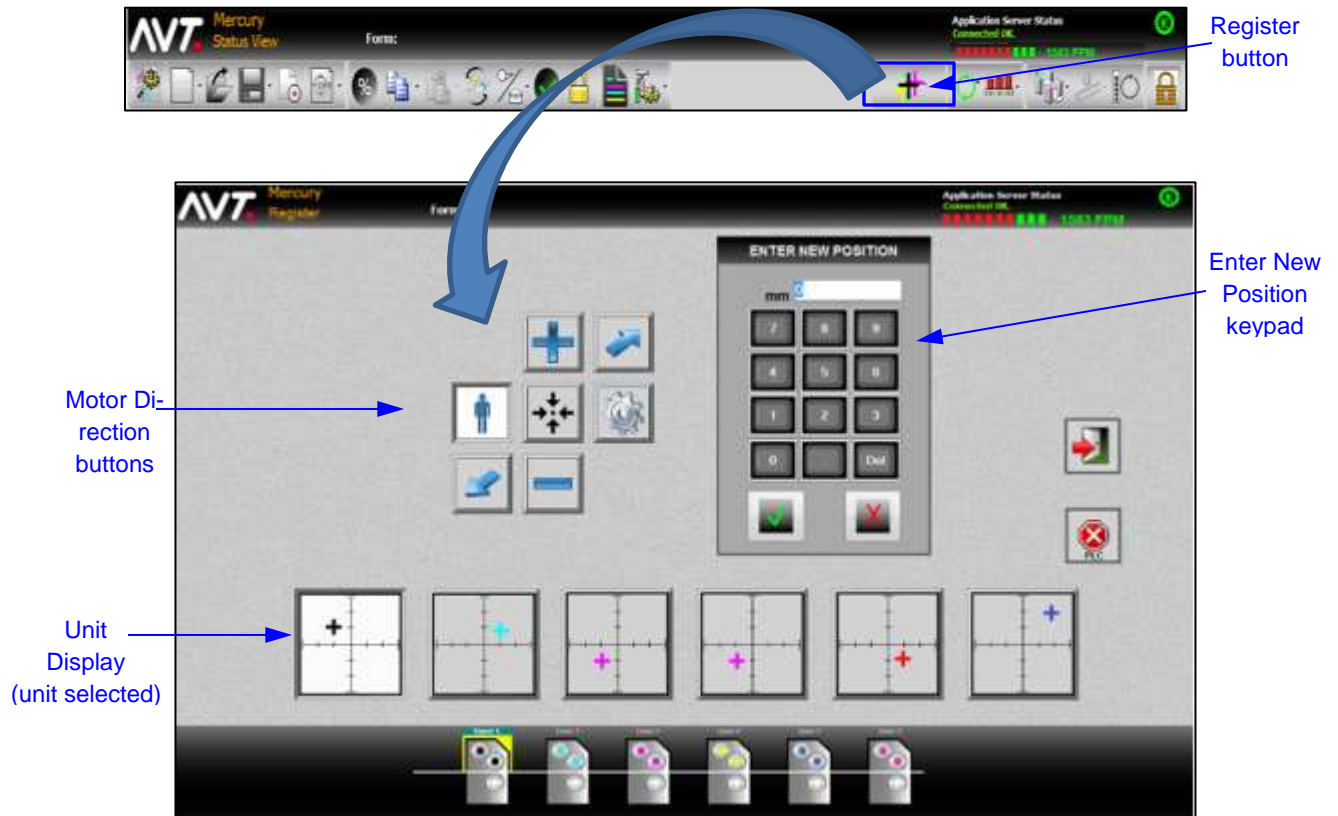
When running a CIC press:

- You can make automatic in fountain adjustments by disabling the Run button requirement.
- An additional % (Percent) button is added (in addition to % Inc/Dec button on main toolbar).
- The ink fountain icons at the bottom of the Status View are changed to represent the CIC press layout icons.
- An Invert Ink Profile button is available on the Status View, to invert an ink profile for a fountain (called a “deck” in a CIC press).
- You can view all thumbnails at the same time on the Summary View, with a visibility of at least 100%.
- You can select one or more ink zones and then use the Direct Entry Input button to access a keypad to specify a new value for the ink zone settings to move to directly.
- You can save and undo changes you make to the current console key settings at any time.

Note: See the *Mercury Advanced User's Manual* for more detailed information on using a CIC press.

5.12 Register Motor Moves

The Register Motor Moves feature allows you to manually control registers on the Register screen, that you access from the Mercury Status View.



When the Register Motor Moves feature is enabled, you can:

- Select units on which to apply register motor moves. You can select the graph or unit from the unit display and multiple units may be selected.
- Select direction of movement. Only one motor direction can be selected at a time. A register on a unit can be moved using the motor direction buttons (Operator, Gear, Advance, Retard, Skew Advance, and Skew Retard).
- Specify distance of movement on the Enter New Position keypad, once units and direction have been selected.

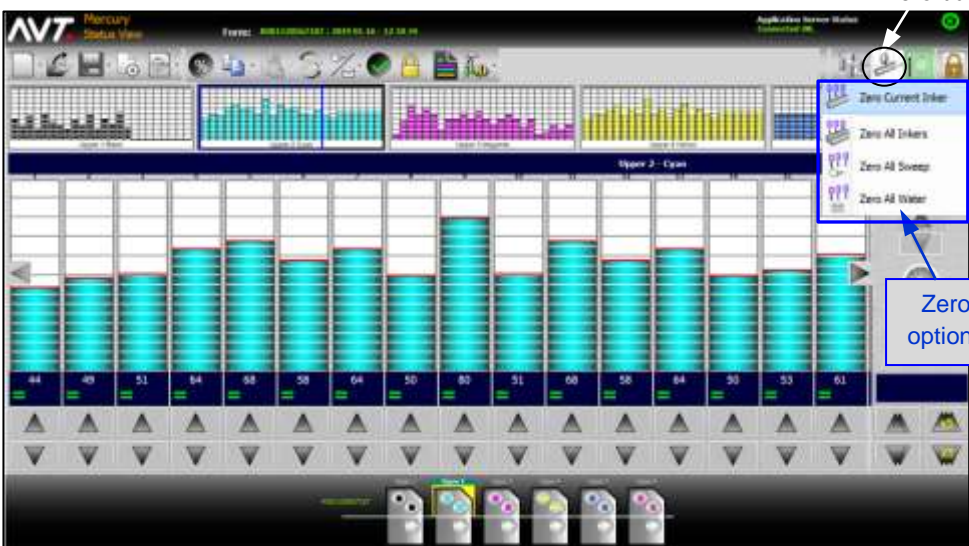
Note: See the *Mercury Advanced User's Manual* for more detailed information on the Register Motor Moves feature.

6 Troubleshooting and Maintenance

This section introduces a few troubleshooting and maintenance tools.

6.1 Zero Ink Servos and Sweeps

AVT servos will drift over time. To use the Mercury zero tool to calibrate a servo to a mechanical zero, follow steps below.

1	Touch the Zero button.
2	<p>Touch one of the Zero options.</p> <p>Note: AVT recommends that you zero ink servos once a day and zero sweeps/waters once a week.</p>  <p>The screenshot shows the AVT Mercury Status View interface. At the top right, there is a 'Zero' button. A blue box highlights this button with an arrow pointing to it, labeled 'Zero button'. Below the Zero button, a menu is open showing four options: 'Zero Current Ink', 'Zero All Inks', 'Zero All Sweeps', and 'Zero All Water'. A blue box highlights this menu with an arrow pointing to it, labeled 'Zero options'. The main area of the interface displays a bar chart with cyan bars and numerical values below each bar (e.g., 44, 49, 51, 54, 58, 58, 64, 50, 60, 51, 60, 58, 64, 50, 53, 61). The top of the interface includes the AVT Mercury logo and 'Status View' text.</p>

- 3 If errors occur while zeroing inkers, the Zero Inkers Errors dialog displays showing a list of inkers with errors.



Touch the **OK** button to acknowledge the errors.

Note: The Zero Inker Error dialog would display all the inker names which have zero servo errors and servo configuration errors at that moment. This means that if the Zero Current Inker command is issued and there are zero errors on other inkers at that moment, then all the inker names with zero errors will be listed on the dialog.


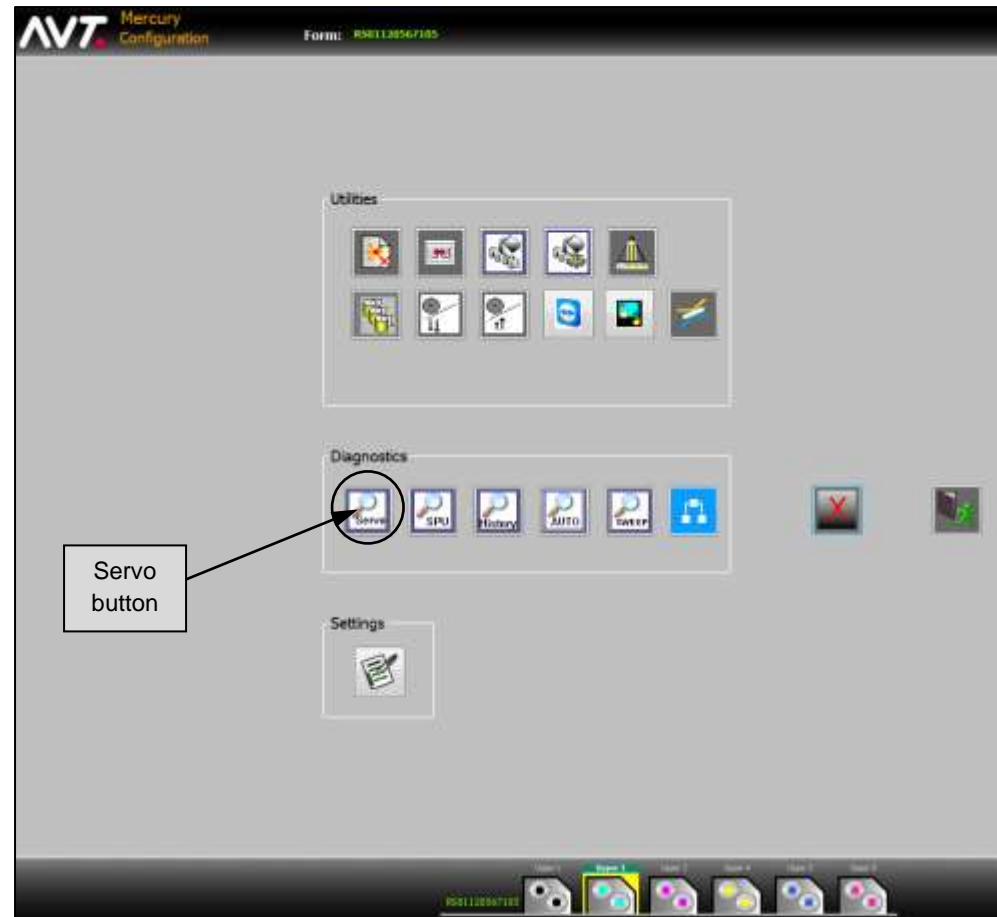
- 4 If you touch the Zero button when zone ink settings are on the Status View, touch **Run Inker** to restore the settings after the zero.

Note: The Zero All Sweep and Zero All Water options are only enabled if your system configuration indicates they are enabled. The options are grayed-out when disabled.

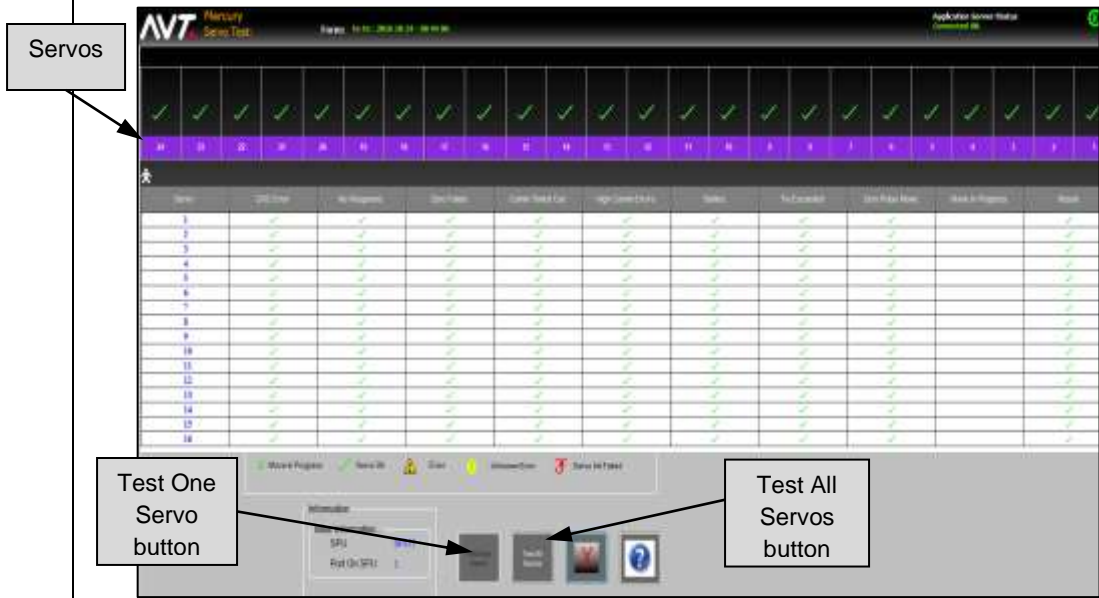
6.2 Perform Servo Test

To test communication between the Mercury computer and the servos, use the Mercury Servo Test diagnostic tool.

6.2.1 Run Basic Servo Test

1	<p>Touch the System button and then touch System from the drop-down menu.</p> 
2	<p>On the Configuration dialog under Diagnostics, touch the Servo button.</p> 

The Servo Test screen displays where you can either test one servo or all the servos.



- 3 To test one servo, touch a **servo** and then touch the **Test One Servo** button. The following screen shows the Servo selected and the **zone status icon** displayed in green for the servo and on the Test One Servo button.



When the test completes, the results of the test display on the screen.



4 To test all servos, touch the **Test All Servos** button.

The following screen shows the **zone status icon** displayed in green for all the servos and on the **Test All Servos** button.



When the test completes, the results of the test display on the screen.

Results of Test All Servos



5 If the Servo test fails, error icons display on the screen. Click the **Stop** button to end the test.

















Note: Touch the **Help** button (question mark) to access the *Mercury Service Manual* and go directly to the section of the manual for the Servo test.

6.2.2 Auto Retry Servo Test

If the servos do not pass the **Servo Test > Test All the Servos** for an inker and the individual servo(s) causing the problem cannot be identified, Mercury enters the Auto Retry mode to isolate the bad servo(s). Auto Retry can help you find the bad servo(s) on a servo rail for the following special cases:

- There is a short circuit in the servo or cable.
- The bad servo is interfering with servo communication.
- The first servo is disconnected.
- No rail is connected to an inker port.


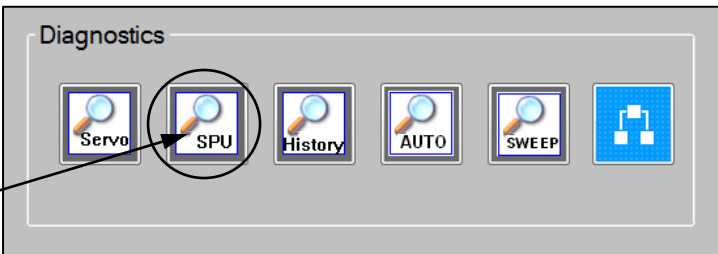
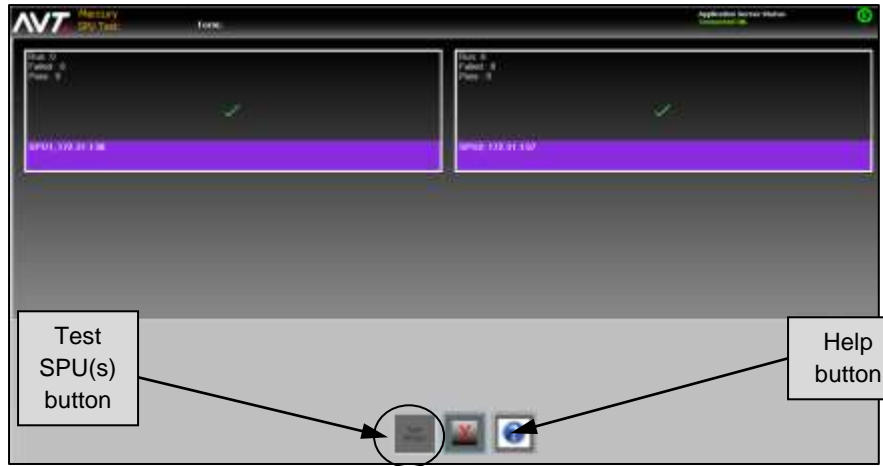

<p>1</p>	<p>When the servo test fails and the following dialog displays, touch the  button to initiate Auto Retry.</p> <div data-bbox="669 747 1182 1144" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Servo Test Status</p> <p>Inker 'Upper3' failed Servo Test. Begin 'Auto Retry' to isolate the bad servo(s)?</p> <div style="display: flex; justify-content: space-around; margin-top: 20px;">   </div> </div> <p>While the Auto Retry is in progress you will see the  icon display on the Start Auto Retry button, along with the status on the Servo Test screen.</p> <div data-bbox="430 1270 1421 1512" style="border: 1px solid black; padding: 10px;"> <div style="display: flex; justify-content: space-between; font-size: small;">  Move In Progress  Servo OK  Error  Unknown Error  Servo Int Failed </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="font-size: x-small;"> <p>Information</p> <p>Inker Information:</p> <p>SPU: SPU1</p> <p>Port On SPU: 3</p> </div> <div style="text-align: center;"> <p style="color: red;">Please wait... Starting Auto Retry</p> <div style="display: flex; justify-content: center; gap: 10px;">     </div> </div> </div> </div>				
<p>2</p>	<p>For every retry operation, review the status of the Auto Retry operation that displays on the Servo Test screen.</p> <table border="1" data-bbox="422 1633 1429 1816" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Inker Status</td> <td> <p>Failed – servo failed test</p> <p>Passed – servo passed test</p> </td> </tr> <tr> <td>Auto Retry Count</td> <td>Number of retries so far during Auto Retry operation.</td> </tr> </table>	Inker Status	<p>Failed – servo failed test</p> <p>Passed – servo passed test</p>	Auto Retry Count	Number of retries so far during Auto Retry operation.
Inker Status	<p>Failed – servo failed test</p> <p>Passed – servo passed test</p>				
Auto Retry Count	Number of retries so far during Auto Retry operation.				

<p>3</p>	<p>When status shows Inker Status: Failed, let Auto Retry continue running and disconnect the servos one by one. Start with the servo farthest away from the servo harness connector.</p> <p>Notes:</p> <ul style="list-style-type: none"> • If connectors are removed from all but the first servo and it still does not run, replace it. • If display then indicates Inker Status: Passed, the first servo was the problem. If not, either cable going to SPU or SPU itself is faulty. • An inker failure will always occur if no servos are connected. • When the connector of the problem servo is removed, the first servo on the fountain will start to run. • Replace bad servo and plug in all connectors that had to be removed.
<p>4</p>	<p>To stop Auto Retry, press the  button.</p> <p>NOTE: The Auto Retry operation will continue to run forever until you stop it.</p>
<p>5</p>	<p>After stopping the Auto Retry operation, the Test All Servos button becomes enabled for you to test the inker(s) again.</p> <p>Touch the Test All Servos button to test the inker again.</p>

Note: See the *Mercury Advanced User's Manual* for more detailed information on the Auto Retry Servo Test feature.

6.3 Perform SPU Test

You can use the Mercury SPU test diagnostic tool to test if the selected SPU is communicating with the server application and able to move the attached equipment.

<p>1</p>	<p>Touch the System button and then touch System from the drop-down menu.</p> 
<p>2</p>	<p>On the Configuration dialog under Diagnostics, touch the SPU button.</p>  <p>The SPU Test screen displays with statistics of total tests run, failed, and passed. You can test a single SPU, multiple SPUs, or all SPUs.</p> 
<p>3</p>	<p>To test one servo or multiple servos, touch the servos to check and touch the Test SPU(s) button. To test all SPUs, just touch the Test SPU(s) button. When the test completes, the results display showing Run, Failed, or Pass.</p> 

Note: Touch the **Help** button (question mark) to access the *Mercury Service Manual* and go directly to the section of the manual for the SPU test.

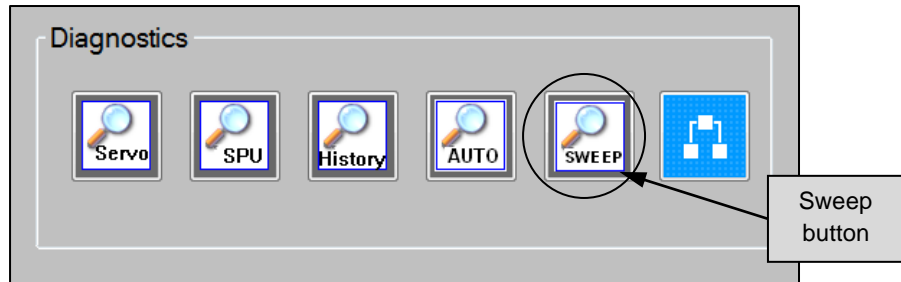
6.4 Perform Sweep Test

You can use the Mercury Sweep test diagnostic tool to test one or more sweeps.

- 1 Touch the **System** button and then touch **System** from the drop-down menu.



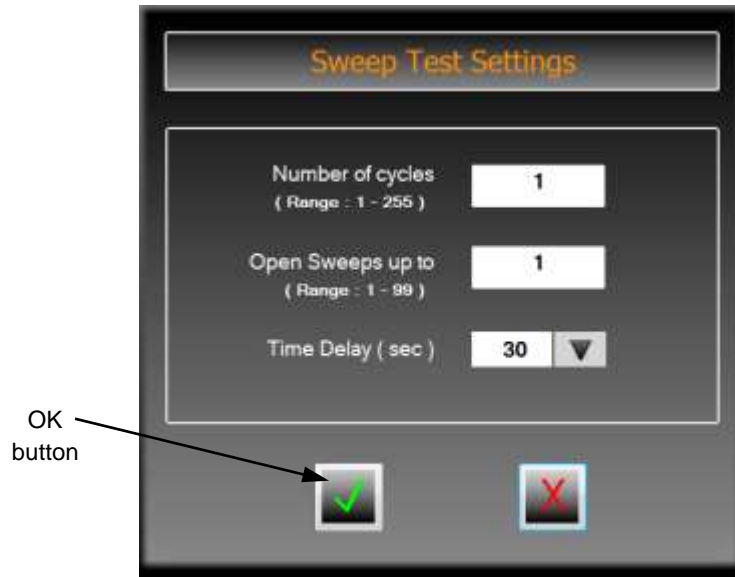
- 2 On the Configuration dialog under **Diagnostics**, touch the **Sweep** button.



The Sweep Test screen displays where you can either test selected sweeps or all the sweeps.

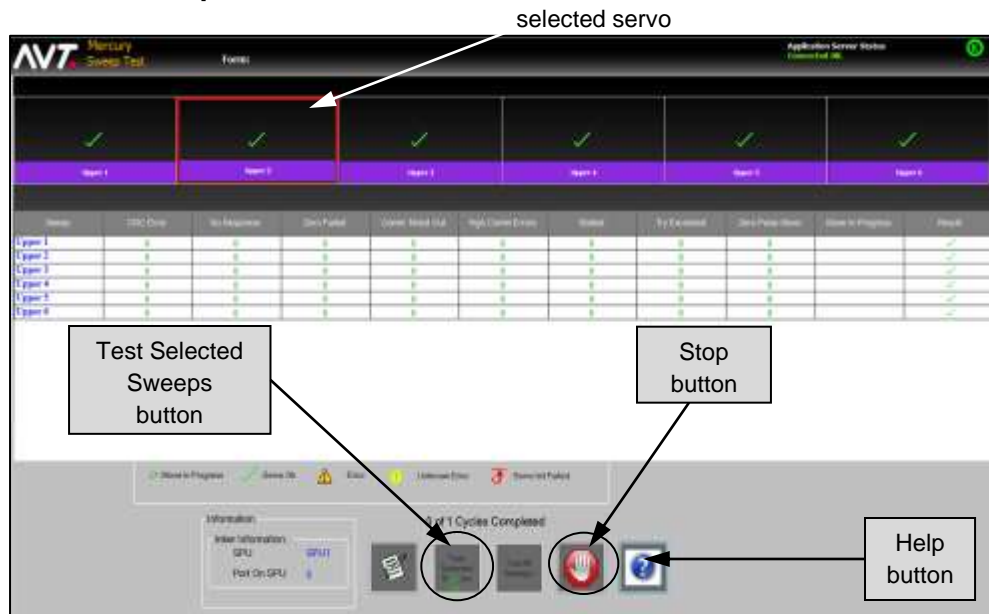


3 Touch the **Sweep Test Settings** button.



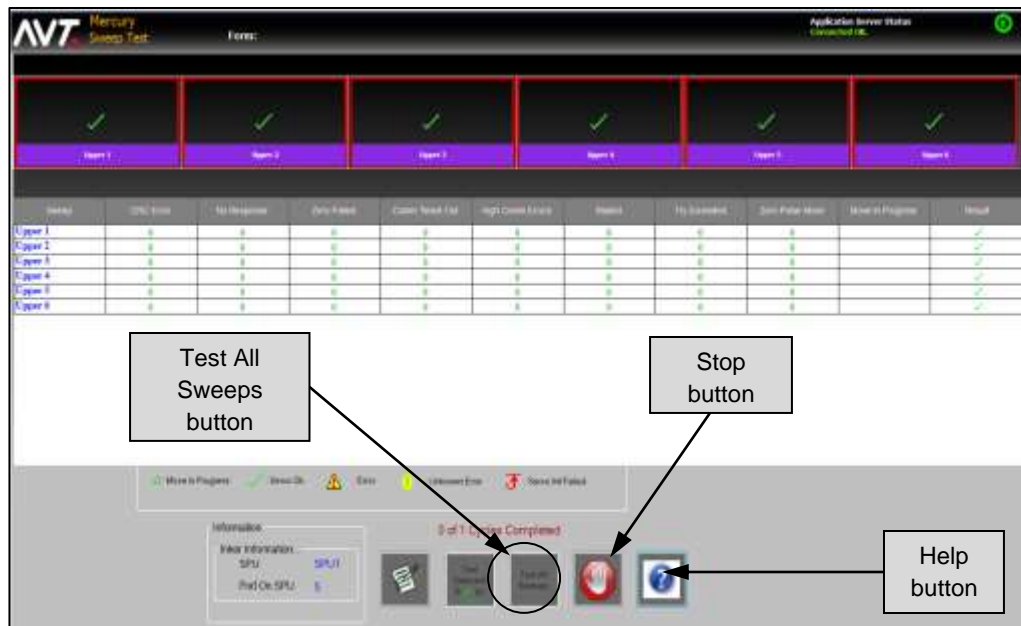
4 Specify the settings for the sweep test and then touch the **OK** button.

5 To test selected sweeps, touch one or more **servos** and then touch the **Test Selected Sweeps** button.




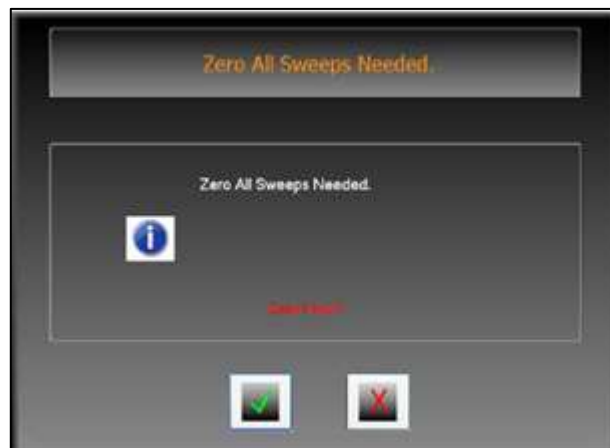
When the test completes, the results display on the screen.

6 To test all sweeps, touch the **Test All Sweeps** button.



When the test completes, the results display on the screen.

7 After the sweep test is complete, click  when the following prompt displays.



Zeroing of all sweeps will occur automatically.

It is necessary to zero all sweeps after a sweep test, to obtain accurate positioning during future use.

Notes:

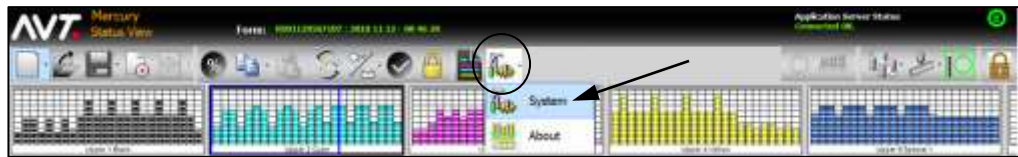
- If errors display on the screen during the test, click the **Stop** button (hand) to end the test. After the test completes, the Stop button becomes an Exit button.
- Touch the **Help** button (question mark) to access the *Mercury Service Manual* and go directly to the section of the manual for Sweep Test.

6.5 Perform Auto Test

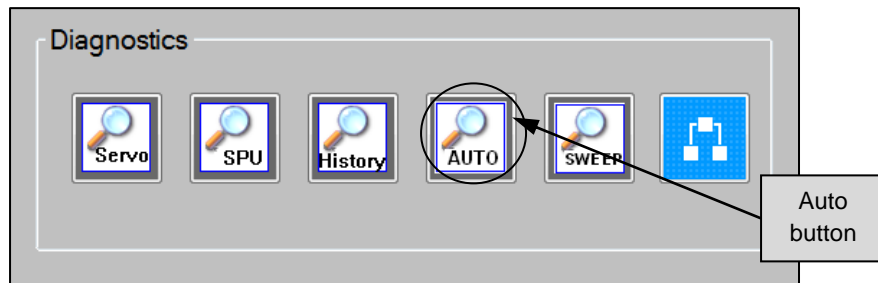
You can use the Mercury Auto test diagnostic tool to test the fountain key actuators and verify that mechanical movement is reliable.

6.5.1 Run Basic Auto Test

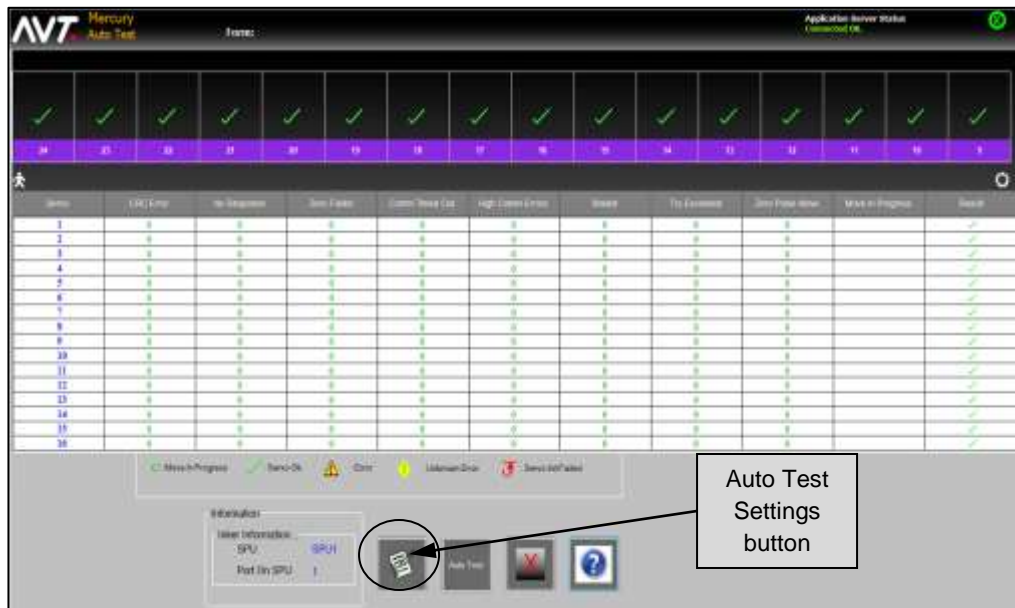
- 1 Touch the **System** button and then touch **System** from the drop-down menu.



- 2 On the Configuration dialog under **Diagnostics**, touch the **Auto** button.



The Auto Test screen displays where you can perform the auto test.



3 Touch the **Auto Test Settings** button.

Inkers to be tested: All Inkers

Open Keys Up To (Range : 1 - 399%) : 1

Close Keys Up To (Range : 0 - 399%) : 1

Number of cycles (Range : 1 - 255) : 1

Loop Type: Simultaneous

Time Delay (sec) : 30

OK button

All Inkers
All Upper Inkers
All Lower Inkers
Current Inker

Simultaneous or Sequential

1, 30, 60 (sec)


4 Specify the settings for the auto test and then touch the **OK** button.

AVT Mercury Auto Test

Application Server Status Connected OK

Key	OK	Fail	Not Tested
0	✓		
1	✓		
2	✓		
3	✓		
4	✓		
5	✓		
6	✓		
7	✓		
8	✓		
9	✓		
10	✓		
11	✓		
12	✓		
13	✓		
14	✓		
15	✓		
16	✓		

Auto Test button

- 5 Touch the **Auto Test** button. The following screen shows the green zone status icon () for all servos and also on the Auto Test button.

Zone Status icons

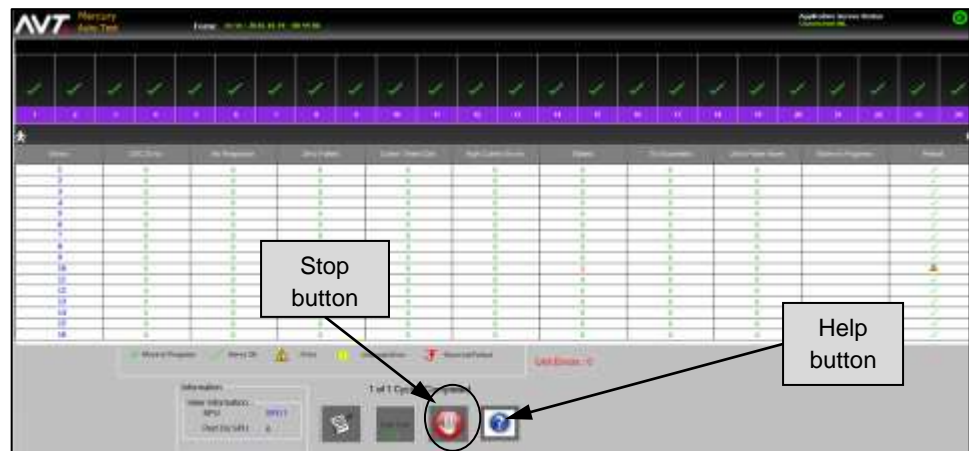


When the test completes, the results display on the screen.

Results of Auto Test



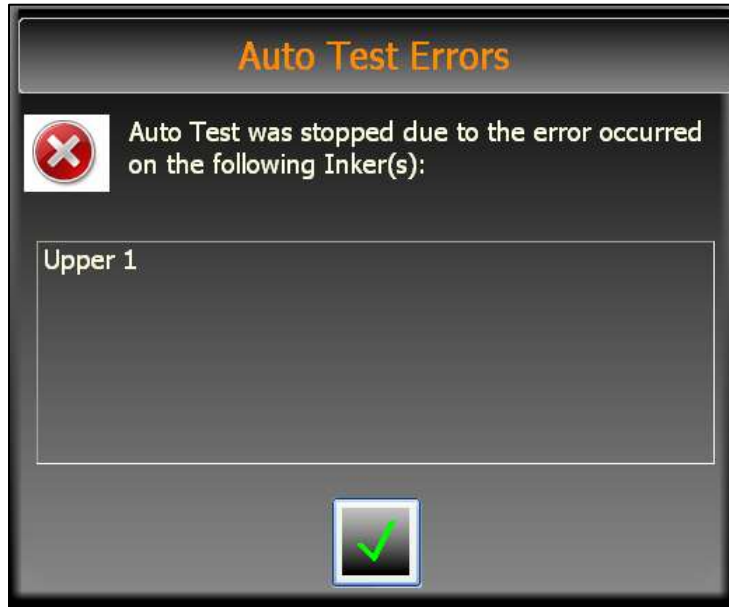
- 6 If errors display on the screen during test, click the **Stop** button to end test.



Note: Touch the **Help** button (question mark) to access the *Mercury Service Manual* and go directly to the section of the manual for Auto Test.


6.5.2 Identify Failed Inker(s) During Auto Test

If errors are detected with one or more inkers during Auto Test, the application server stops the test and displays an error dialog.



This will let you know why the test stopped and identify which inker(s) are having issues before finishing the full Auto Test.

6.6 Re-Initialize SPU

A flashing **Set Press** button  displays on the Mercury Status view to notify the user about an SPU re-initialization. The Set Press button only flashes when the Mercury workstation application is running and connected to the server application, and the SPU is re-initialized.

An SPU re-initialization may occur when:

- The SPU was power-cycled and the server was not aware the SPU was reset.
- There was a sudden loss of communication between the server and SPU, causing communication errors. The server re-initializes the SPU.
- A move timed-out on the SPU and the SPU was not responding.











After a successful re-initialization, commands can be sent to the SPU without zeroing the fountains.

Appendix A – Zone Status Icons

Under the ink zones on the Status View, there is an ink zone data display area that provides feedback on each zone setting.



Following is a list of all the **zone status icons**.

	Indicates ink servo value equals console value.
	Indicates servo for OCU zone is currently running.
	Indicates a stalled servo.
	Indicates SPU failed to initialize.
	Indicates a configuration error: <ul style="list-style-type: none"> • One of servos in that rail has gone bad. • Harness has gone bad. • Mismatch in configuration from MCxxxx.xml to actual servos on rail.
	Indicates last move for OCU zone's servo returned a servo or SPU communication error.
	Indicates zones were retracted.
	Indicates SPU re-initialization is in progress.
	Indicates zone is locked.
	Indicates zone is in closed loop control.

Appendix B – Declaration of Conformity



EC Declaration of Conformity

Company Name and Address:

AVT (Advanced Vision Technology)
10460 Miller Road
Dallas, TX 75238 USA

Name and address of the company authorized to compile the Technical File:

AVT (Germany) GMBH
32 Donnersbergerstrasse
Munich P0634 Germany
Tel: + 49 - 89 - 216 - 68-079
Fax: + 49 - 89 - 216 - 68 - 166

AVT declares under our sole responsibility that the product described as:

Equipment Name: Mercury
Generic Equipment Description: Remote Ink Control System for Printing Industry
Model/Type:
Serial number(s): 7168 - 99999

Complies with the requirements of the following European Directives:

2006/42/EC	Machinery Directive
2004/108/EC	Electromagnetic Compatibility Directive

Main standards considered:

EN ISO 12100:2010,
EN 60204-1:2006 +A1:2009, EN ISO 13849-1:2008,
EN 61000-6-2:2005, EN 61000-6-4:2007 +A1:2011

AVT Technical File Document Number: 500G300068

Date: 8/11/2015 **At:** AVT Dallas TX USA

Name of Authorized company representative: Alan Then

Signature: 
Alan Then, General Manager, AVT Dallas TX USA

500G100196 Rev. A

Revision History

Version 1.7

Revision Date	Revised By	Version	Section / Page Numbers	Revision Description
9/22/2020	SW	1.7 A	All	<ul style="list-style-type: none"> • Initial release of V1.7. • Updated screen shots, as needed. • Incorporated updates for V1.70 (“Adjust All Zone X5” to 4.1.2-4.1.3; “Enter Percentage Value” popup to 4.1.4; new sub-sections 5.10 - “Ink Sweep & Water Ramping”, 5.11 - “CIC Press”, and 5.12 - “Register Motor Moves”). • Added number of forms to Recall Form View, section 3.3). • Reordered topics in section 5, based on most popular features. • Added CAT5 Ethernet cable to 1.2.

Version 1.6

Revision Date	Revised By	Version / EO	Section / Page Numbers	Revision Description
11/28/2017	SW	1.6 A (17392)	All	<ul style="list-style-type: none"> • Initial release of V1.6. • Updated screen shots, as needed. • Incorporated updates for V1.60, (new sections for Newspaper Press, Basic Servo Test, and Auto Retry Servo Test; details on Zero Inker Error dialog).
4/2/2018	SW	1.6 B (#####)		<ul style="list-style-type: none"> • Added new appendix to include “Declaration of Conformity”. • Added new section 1.1 to include “Mercury System Installation”.

Version 1.5

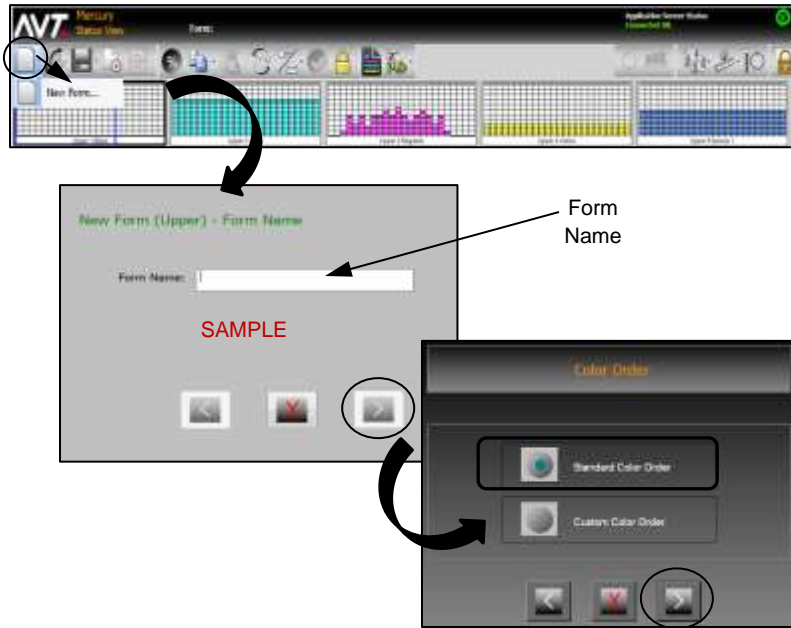
Revision Date	Revised By	Version / EO	Section / Page Numbers	Revision Description
11/21/2016	SW	1.5 A (17096)	All	<ul style="list-style-type: none"> Initial release of V1.5. Converted version 1.2 from Frame-Maker to Word. Updated all screen shots. Incorporated updates for V1.32, V1.40, and V1.50.

Version 1.2

Revision Date	Revised By	Version / EO	Section / Page Numbers	Revision Description
5/20/2010	SW	1.2 (15448)	All	Initial release.
6/8/2010	SW	1.2 B (15600)	All Section 4 Section 3	<ul style="list-style-type: none"> Updated all screen shots with main toolbar, to include Color OK button. Added new section (4.5) called "Save Current Ink Profiles with Color OK". Updated screen shots/description of End Form (3.2.4) and Recall/Save Form (3.5) when another form is currently running. Choose to save Color OK or current fountain profiles.
8/19/2010	SW	1.2 C (15660)	Section 2.1	Added new screen shots and explanation of system startup - initialization pop-ups.
11/9/2010	SW	1.2 D (15714)	Front matter and Quick Reference	Updated email addresses on Front Matter; added updates to Quick Ref.
3/9/2015	SL	1.2 E (16630)	Front matter	Updated address and logo on PDF file only.

Mercury Quick Reference

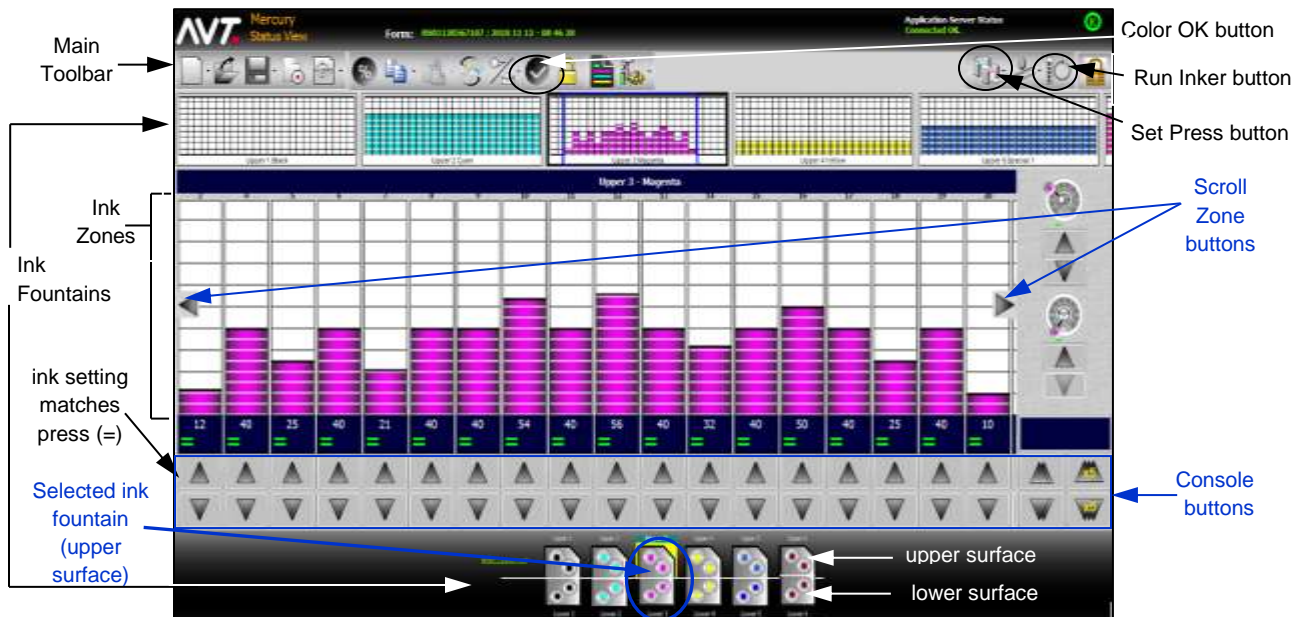
Set Up a New Form






1. On the Mercury console, touch the **New Form** button on the main toolbar and then touch **New Form** from the drop-down menu.
If a form is currently running, you will be asked to save and end, or end without save. Typically, you will save the form for future recall.
2. On the New Form - Form Name screen, touch anywhere in **Form Name** field, enter name on keypad, and touch
3. Touch and select **Standard Color Order**. (See the *Mercury Advanced User's Manual* for information on custom color order.)
4. Touch and to confirm the form creation.
5. Repeat steps for the other surface.

Adjust Ink Zone Settings

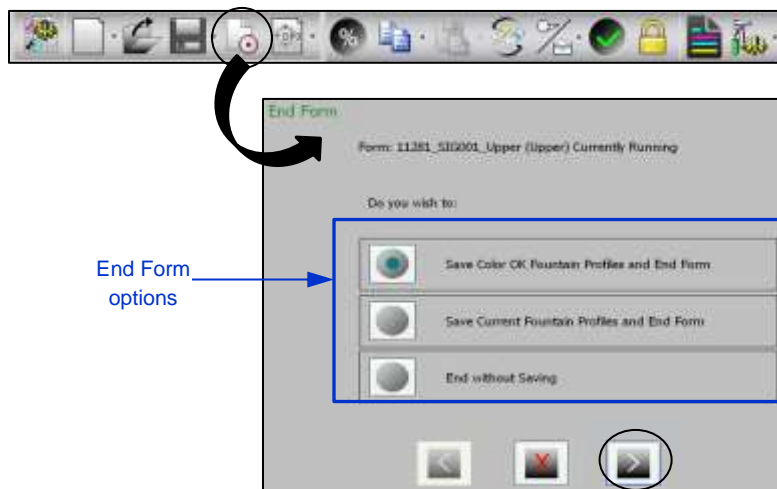
On the Status View, ink fountains display as thumbnails under the main toolbar and as icons at the bottom of the view. Use the **Scroll Zone** buttons to scroll to more ink zones. You can configure the number of ink zones that display.





Adjust Ink Zone Settings (continued)

1. Touch an **ink fountain** to select it. To select the ink fountain surface, touch an **upper surface** or **lower surface**.
 2. Adjust one or more ink zones using the **Console** buttons. As you make adjustments, the slider moves up or down and the zone values (2-digit number) change.
 3. Touch  (**Run Inker**) to set ink zone adjustments or touch  (**Set Press**) to send all adjustments to the press. When the ink zone settings match the press, the ink zones show an = sign.
 4. Touch  (**Color OK**) to save best ink profiles of a form and adjust scan correction values for selected paper type.
-

End and Save Form



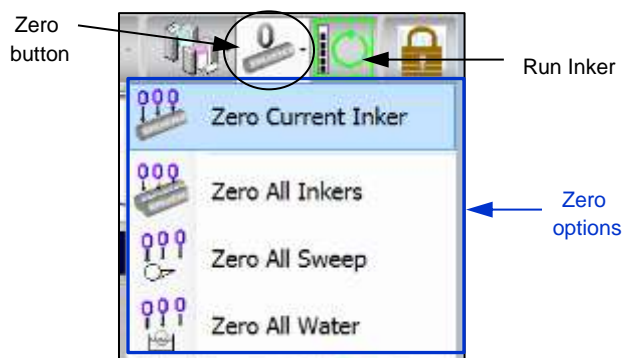
You end a form from the Status View.

1. Touch the **End Form** button on the main toolbar.
2. On the End Form screen, select either **Save Color OK Fountain Profiles and End Form**, **Save Current Fountain Profiles and End Form** or **End without Saving**.
3. Touch  and  to confirm the end form.

Note: Typically, you will end form and save it with the name you used to set up the form.

See the *Mercury Training & User's Guide* for more detailed information on saving a form.

Zero Ink Fountains



Hint: Zero ink servos once a day and ink sweeps once a week.

You can zero ink zone settings from the Status View. Zero all inkers and zero all sweeps when a job ends, or press will be idle for an extended period of time.

1. Touch the **Zero** button at the top right of the Status View.
2. Touch one of the **zero options** from the drop-down menu.

Notes:

- You will be notified of zero errors on the **Zero Inker Errors** dialog.
 - If you zero with ink zone settings on the Status View, touch **Run Inker** to restore settings after zero.
-

Set Up CIP3 Presets (Optional Feature)



You can configure presetting for all inkers on the press using CIP3 presets. You set up CIP3 presets from the Mercury Status View.

1. On the Mercury console, touch the **CIP3** button on the main toolbar and then touch **New CIP3 Presets** from the drop-down menu.

The CIP3 Presetting screen displays with a list of available CIP3 presets.

2. Touch a preset file from the **Available CIP3 Presets** list, touch the **Add** button (+), select **surface** radio button, and then click .

The CIP3 preset file is moved to the **Added Presets** list.

Typically, no changes will be needed to the color order. If changes or special colors are required, see the *Mercury Advanced User's Manual* for more information.

3. Touch to set additional CIP3 preset values.

4. To change the paper type, click on the **Change** button for **Paper Type**, select a paper type from the list, and then touch the **OK** button.

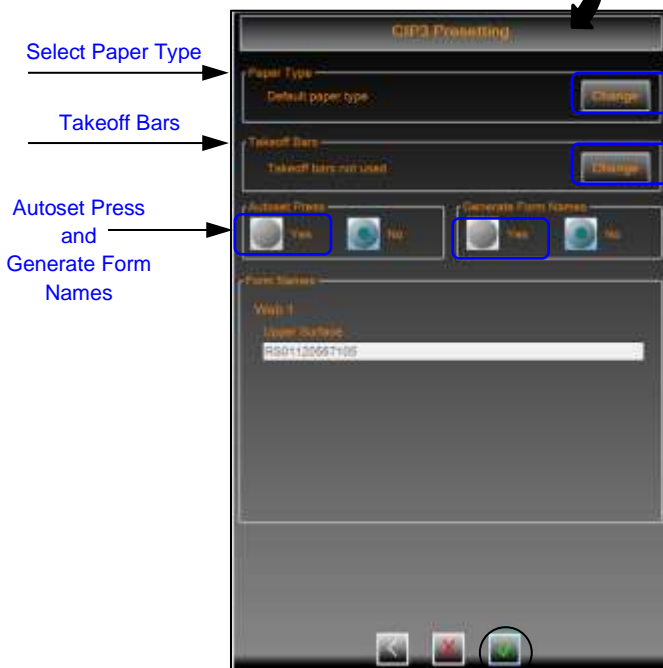
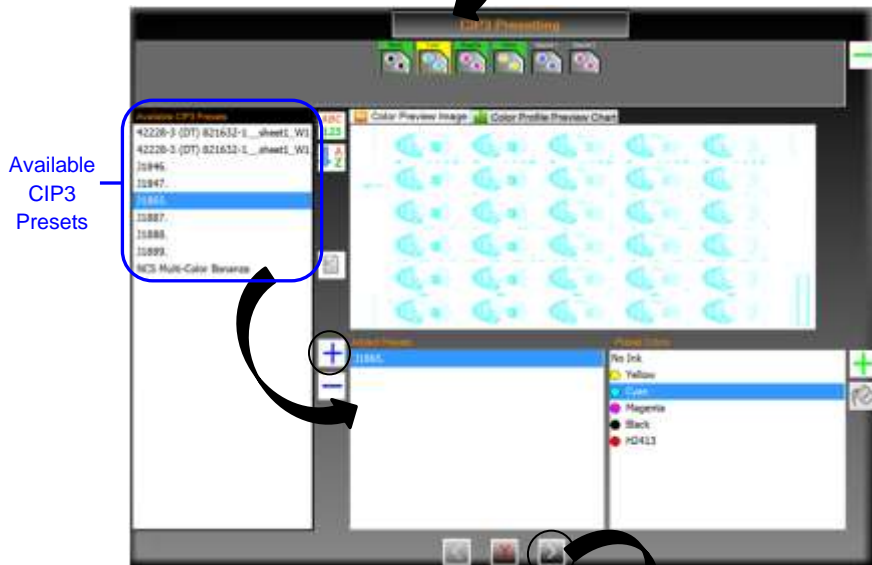
5. If you are using takeoff bars, click on the **Change** button for **Takeoff Bars**, touch **Yes**, specify a valid **Image Width**, and then touch the **OK** button.

6. Touch **Yes** to Autoset Press.

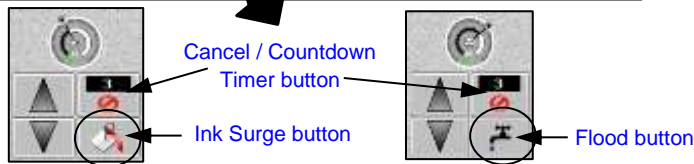
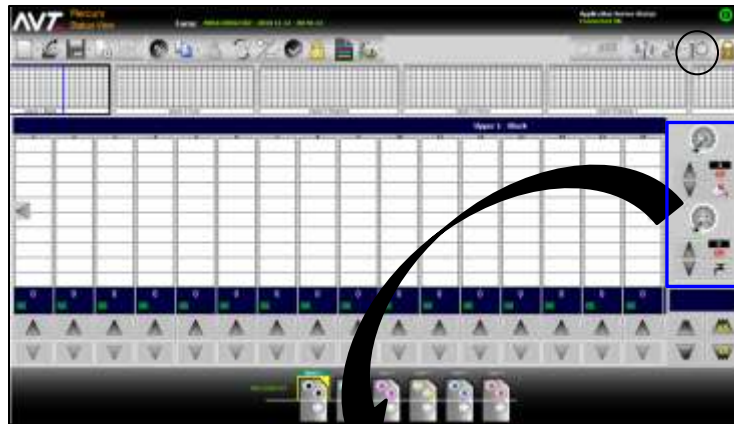
7. Touch **Yes** to Generate Form Names. (You must end the previous form before creating a new name.)

8. Click to assign the preset values.

9. Repeat steps for the other surface.






Control Ink Sweep / Water Ramping (Optional Feature)

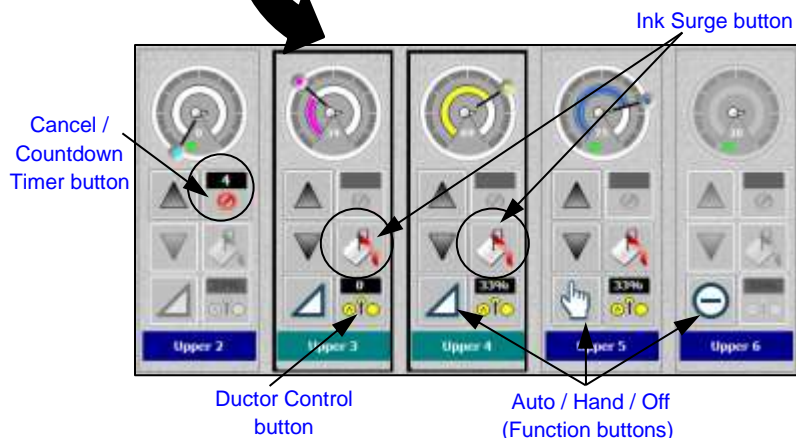


You can control sweep and water ramping on the Status View, and also from the Sweep All and Water All screens.

Adjust Ink Surge or Flood on Status View




You can adjust ink surge or water flood times for a selected ink fountain on the Status View.

1. Touch **Ink Surge**  or **Flood**  buttons.
The **Cancel / Countdown** button shows time for surge or flood. You can touch the buttons multiple times to add surge or flood time. See the *Mercury Advanced User's Manual* for more information.
2. Click **Run Inker**  button to set the surge or flood adjustments.



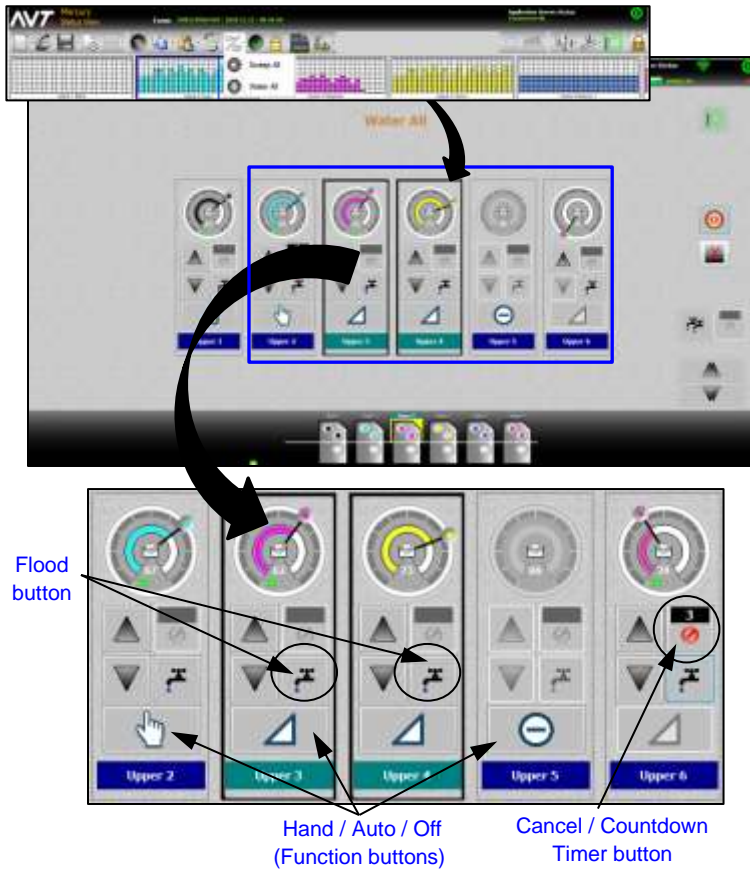
Adjust Ink Surge on Sweep All Screen

To adjust ink surge time for one or more inkers or for all inkers on Sweep All screen.

1. On the Mercury console, touch the **Sweep/Water All** button on main toolbar and then touch **Sweep All** from drop-down menu.
2. On Sweep All screen, touch **inkers** to be adjusted (or none if adjusting all).
3. Verify that **Auto**  is setting for inker **Function** buttons.
4. For the selected inkers, click  (**Ink Surge**) button to increase timer. Each click increases the time on the **Countdown Timer** button.
5. Touch  (**Run Inker**) to start timer and turn on output to the press.
Trim value will be set to configured value, timer counts down to zero, and original trim values will be restored.




See the *Mercury Advanced User's Manual* for more information on sweep and water ramping.

Control Ink Sweep / Water Ramping (continued)










Adjust Water Flood on Water All Screen

To adjust water flood time for one or more waters or for all waters on Water All screen.

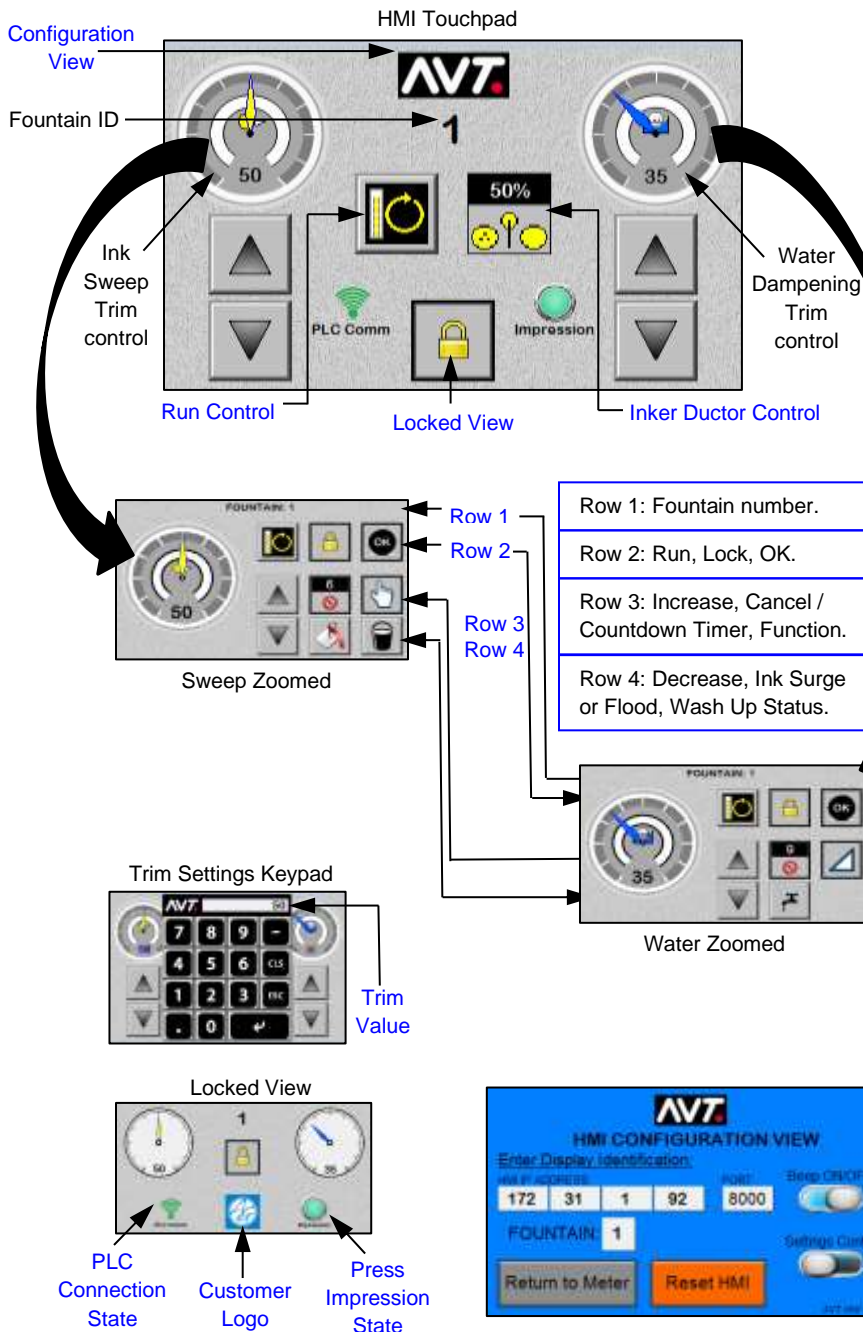
1. On the Mercury console, touch the **Sweep/Water All** button on main toolbar and then touch **Water All** from drop-down menu.
2. On Water All screen, touch **waters** to be adjusted (or none if adjusting all).
3. Verify that **Auto**  is setting for water **Function** buttons.
4. For the selected waters, click  (**Flood**) button to increase timer.
Each click increases the time on the **Countdown Timer** button.
5. Touch  (**Run Inker**) to start timer and turn on output to the press.

Trim value will be set to configured value, timer counts down to zero, and original trim values will be restored.

See the *Mercury Advanced User's Manual* for more information on water ramping.

 Ink Surge	Runs ink sweep at 100% for a pre-determined amount of time.
 Flood	Runs water control at 100% for a pre-determined amount of time.
 Surge All	Sends surge signal to all fountains. Fountain must be part of same split and in Auto mode.
 Flood All	Sends flood signal to all fountains. Fountain must be part of same split and in Auto mode.
 Cancel/Countdown Timer	Cancel surge or flood immediately. The <i>nn</i> part of button shows time for surge or flood.
 Function buttons Auto / Hand / Off	Toggles to one of three states. Auto – Runs sweep or water at the setting on the dial. Hand – Runs sweep or water at predetermined speed. Off - Sets sweep/water to zero.
 Ductor Control	Toggles to one of four states, configured in SiteGen file.

Control Ramping with Press Side Controls (Optional)



You can perform basic sweep and water ramping functions using an HMI touchpad with press side controls mounted on each unit.

- On the HMI touchpad:
 - Touch or to increase or decrease trim value by 1 percent.
 - Touch upper half of **Ink Sweep Trim** or **Water Dampening Trim** control to access zoomed views.
 - Touch digits of **Ink Sweep Trim** or **Water Dampening Trim** control to access Trim Settings keypad.
 - Touch to lock controls and access Locked view.
 - Touch to access the HMI Configuration View.
 - Touch to execute any changes made using touchpad.
- On the Sweep/Water Zoomed screens:
 - Click (**Ink Surge**) or (**Flood**) button to increase timer.
 - Touch to confirm changes.
 - Touch to return to main view.
- On the Trim Settings keypad
 - Enter the **trim value**, using keypad.
 - Touch to update trim value.
- On the Locked view, view current status of ink sweep and water controls.
- On the HMI Configuration View:
 - Change the **HMI IP Address**.
 - Click **Reset HMI** to load PLC limits and settings into HMI memory.
 - Click **Beep ON/OFF** to control noise when touch display keypad.

See the *Mercury Advanced User's Manual* for more information on sweep and water ramping with the press side controls.

Contact Information:

Service: +1 972-290-3121 support@avt-inc.com